File No. 251098 **Committee Item No.** _____
Board Item No. 23

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: _____ **Date:** _____
Board of Supervisors Meeting **Date:** February 10, 2026

Cmte Board

☐	☐	**Motion**
☐	☐	**Resolution**
☐	☐	**Ordinance**
☐	☐	**Legislative Digest**
☐	☐	**Budget and Legislative Analyst Report**
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☐	☒	**Introduction Form**
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☐	☐	**MOU**
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☐	☐	**Grant Budget**
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OTHER

☐	☒	Appeal Letter 10/27/25
☐	☒	Appellant Supplemental Information 1/30/26
☐	☒	Project Sponsor Supplemental Response 2/2/26
☐	☒	Planning Department Revised Response 12/8/25
☐	☒	Planning Department Response 12/5/25
☐	☒	Appellant Continuance Waiver 12/03/25
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☐	☒	Clerical Documents

Prepared by: Arthur Khoo **Date:** December 4, 2025
Prepared by: Jocelyn Wong **Date:** February 6, 2026

NOTICE TO BOARD OF SUPERVISORS OF APPEAL
FROM ACTION OF THE CITY PLANNING COMMISSION

Notice is hereby given of an appeal to the Board of Supervisors from the following action of the City Planning Commission.

The property is located at **350 Amber Drive**, SAN FRANCISCO, CA 94131.

SEPTEMBER 25, 2025
Date of City Planning Commission Action
(Attach a Copy of Planning Commission's Decision)

OCTOBER 27, 2025
Appeal Filing Date

_____ The Planning Commission disapproved in whole or in part an application for reclassification of property, Case No. _____.

_____ The Planning Commission disapproved in whole or in part an application for establishment, abolition or modification of a set-back line, Case No. _____.

X The Planning Commission approved in whole or in part an application for conditional use authorization, Case No. 2024-004318CUA.

_____ The Planning Commission disapproved in whole or in part an application for conditional use authorization, Case No. _____.

Statement of Appeal:

a) Set forth the part(s) of the decision the appeal is taken from:

1) Adoption of Shadow Findings pursuant to Planning Code Section 295 that net new shadow from the installation of a new 104-foot-tall monopole for a new AT&T Wireless Macro Wireless Telecommunications Services (WTS) Facility, consisting of twelve (12) new antennas, nine (9) remote radio units and ancillary equipment would not adversely affect the use of George Christopher Playground and Glen Canyon Park;

2) Conditional Use Authorization pursuant to Planning Code Sections 211.2 and 303, to permit the installation of a new 104 foot tall monopole for a new AT&T Wireless Macro Wireless Telecommunications Services (WTS) Facility, consisting of twelve (12) new antennas, nine (9) remote radio units and ancillary equipment, within a P (Public) Zoning District and OS Height and Bulk District

b) Set forth the reasons in support of your appeal:

1) Inadequate analysis and consideration of Project's potential adverse impacts, including on seismic activity and safety, landslide risks, fire hazards and safety, air quality and pollutant emissions, threats to human health, and impacts on Glen Canyon Park and existing natural resources;
2) Inconsistency with Objectives and Policies of the General Plan and City land use policies;
3) Inadequate findings required for Conditional Use Authorization and Shadow Findings; and
4) Project's ineligibility for CEQA Class 3 categorical exemption. See attached appeal justification letter.

Person to Whom Notices Shall Be Mailed

DANIEL SCHERECK
Name

DIAMOND HEIGHTS COMMUNITY ASSOCIATION
PO Box 31529, SF CA 94131
Address

831-277-9930
dhcasf@gmail.com
Telephone Number

Name and Address of Person Filing Appeal:

DANIEL SCHERECK
Name

DIAMOND HEIGHTS COMMUNITY ASSOCIATION
PO Box 31529 SF CA 94131
Address

831-277-9930
dhcasf@gmail.com
Telephone Number

Signature of Appellant or Authorized Agent

Planning Commission Case No. 2024-004318COA

The undersigned declare that they are hereby subscribers to this Notice of Appeal and are owners or "Verified Tenants" of property affected by the proposed amendment or conditional use (that is, owners or "Verified Tenants" of the property within the area that is the subject of the application for amendment or conditional use, or within a radius of 300 feet of the exterior boundaries of the property.

If ownership has changed and assessment roll has not been amended, we attach proof of ownership change. If signing for a firm or corporation, proof of authorization to sign on behalf of the organization is attached.

"Verified Tenants" that sign below, hereby declare under penalty of perjury, under the laws of the State of California that the foregoing is true and correct, and that the tenant occupies the entire property or at least one separate unit on the property pursuant to a lease with a term exceeding 32 days.

	Street Address, property owned or rent	Assessor's Block & Lot	Owner or Verified Tenant	Printed Name	Original Signature
1	266 AMBER DRIVE	7509/033	GERALD POATEK	GERALD POATEK	
2.	278 Amber DR	7509/051	ERADLE/DEBORAH NOSOWSKY	Deborah Nosowsky	
3.	950 Duncan St #E	7517/133	Alfred Randolph	Alfred Randolph	
4.	950 Duncan St #D	7517/133	Marcia Sanchez	MARCIA SÁNCHEZ	
5.	940 Duncan #205	7517/121	mark miles	Mark Miles	
6.	940 Duncan #202	7517/118	Jonathan Schiffer	Jonathan Schiffer	
7.	940 Duncan #203	7517/119	Molly Mollin	Molly S. Mollin	
8.	940 Duncan #204	7517/120	Irina Eremenko	Irina Eremenko	
9.	940 Duncan #206	7517/122	STEVEN BLUM	STEVEN BLUM	
10.	940 Duncan 305	7517/129	JORDAN CORDLE	JORDAN CORDLE	
11.	275 Amber Dr	7513/041	Giordani Rivas	Giordani Rivas	
12.	975 Duncan	7513/032	TIMOTHY WOLFRED	TIMOTHY WOLFRED	
13.	969 Duncan	7513/033	HOBART HARRIS	HOBART HARRIS	
14.	971 Duncan	7513/033	RITA MUKHTAR	RITA MUKHTAR	
15.	973 Duncan	7513/032	Martin Pavelo	MARTIN PAVELO	
16.	272 Amber Dr	7509/050	DAVID DAI	DAVID DAI	
17.	272 Amber Dr	7509/050	Diem Dam Trang	Trinh Diem Trinh	
18.	293 Amber Dr	7513/012	Powen Li	Powen Li	
19.	963 Duncan	7513/035	Catherine Dodd	Catherine. Dodd	
20.	970 DUNCAN 208F	7517/172	LEE A. TRIFTI	LEE ANN TRIFTI	

(All information provided is subject to public disclosure; personal information will not be redacted.)

84. 261 Amber Dr 7513-038 VLADIMIR KOSTIUKOV VLADIMIR KOSTIUKOV

85. 261 Amber Dr 7513-038 Iuliia Kostiukova Iuliia Kostiukova

	Street Address, property owned or rent	Assessor's Block & Lot	Owner or Verified Tenant	Printed Name	Original Signature
21.	989 Duncan St	7513/028	Julie Wasem	Julie Wasem	
22.	970 Duncan Apt 305 F	7517/177	Simon Rowe	Simon Rowe	
23.	5160 Diamond Hts Blvd. # C201	7517/081	Diane Houser	Diane Houser	
24.	957 Duncan st	7513/035	Terri Woo	Terri Woo	
25.	959 Duncan st	7513/035	Terri Woo	Terri Woo	
26.	961 Duncan St	7513/035	LINDA ENGLISH	LINDA ENGLISH	
27.	970 Duncan 301F	7517/173	Amalia Aboitiz	Amalia Aboitiz	
28.	950 Duncan St #208E	7517/148	Yinan Brassfield	YINAN BRASSFIELD	
29.	970 Duncan #308F	7517/180	Morgan Babbs	Morgan Babbs	
30.	970 Duncan #108	7517/164	Janet Sheffner	Janet Sheffner	
31.	319 Amber Dr.	7513/006	Dennis Senft	Dennis Senft	
32.	175 Red Rock Way #107K	7517/271	Nancy Hillan	Nancy Hillan	
33.	970 Duncan, #F 206	7517/170	Holley Neuman	Holley Neuman	
34.	951 Duncan ST	7513/053	Herbert Lew	HERBERT LEW	
35.	949 Duncan St.	7513/053	Po Yu Lew	Po Yu Lew	
36.	970 Duncan 205F	7517/169	[illegible]	[illegible]	
37.	970 Duncan 206F	7517/168	Tenant	Christine Jandura	
38.	970 Duncan St. 201F	7517/165	Terry Burchell	Terry Burchell	
39.	175 Red Rock Way 307K	# 7517/295	Rui Hong	Rui Hong	
40.	323 Amber Dr.	7513/005	Sylvia Horn	Sylvia Horn	
41.	970 Duncan Street #F203	7517-167	Greg Egertson	Greg Egertson	
42.	963 Duncan st	7513-035	Mary Foley	Mary Foley	
43.	5160 Diamond Hts Blvd #C101	7517-173	Kristie Korken	Kristie Korken	
44.	970 Duncan St.	7517-166	Carolyn Bailey	Carolyn Bailey	
45.	55 Red Rock Way # 202	7517-456	Charles Madden	Charles Madden	
46.	5160 Diamond Hts Blvd # 304C	7517/092	Lisa Valentinsson	Lisa Valentinsson	
47.	956 Duncan St.	7513/055	Sammy Lee	Sammy Lee	
48.	963 Duncan St.	7513/055	Samantha Lee	Samantha Lee	
49.	55 Red Rock Way 0303	7517/447	Margaret Essling	Margaret Essling	
50.	55 Red Rock Way 0-301	NOT IN PIM	JAY TANGUAY	JAY TANGUAY	
51.	55 RED ROCK WAY 0-211	7517-443	SHANNON LAMBRECHTS	SHANNON LAMBRECHTS	
52.	135 Turquoise Way	7509-005	David White	David White	

(All information provided is subject to public disclosure; personal information will not be redacted.)

83.	970 DUNCAN 307F	7517-179	Terence Groeper	Terence Groeper	Terence Groeper

	Street Address, property owned or rent	Assessor's Block & Lot	Owner or Verified Tenant	Printed Name	Original Signature
53.	135 Turquoise Way	7509-005	Celia Waggoner	Celia Waggoner	
54.	151 Turquoise Way	7509-056	Tina Will	Tina will	
55.	995 DUNCAN ST	7513-027	DALGLISH CHEW	DALGLISH CHEW	
56.	55 Red Rock Way 0207	7517-439	Peter J. Lee	Peter J. Lee	
57.	970 DUNCAN ST. F306	7517-178	FRANCIS OLIVEIRA	FRANCIS OLIVEIRA	
58.	950 Duncan St	7517/149	[illegible]	[illegible]	
59.	5160 Diamond Hghts #C102	7517-074	Daniel Schereca	Daniel Schereca	
60.	940 DUNCAN ST #D-107	7517/115	JOAN GILL	JOAN GILL	
61.	970 Duncan St F106	7517/162	Mary Scheib	Mary Scheib	
62.	970 #E-101 DUNCAN	7517/160 (180)	Rick Happer	Rick Happer	
63.	175 Red Rock Wk	7517/275	Eric Lundgren	Eric Lundgren	
64.	303 Amber Dr.	7513/010	Eleanor Ng	Eleanor Ng	
65.	950 Duncan #307	7517/155	LINDA LEAVITT	LINDA LEAVITT	
66.	977 DUNCAN	6600-029	JONATHAN WOYTEK	JONATHAN WOYTEK	
67.	977 DUNCAN	6600-029	PATRICIA WOYTEK	Patricia WOYTEK	P. Woytek
68.	970 Duncan - F207	7517-171	Eleni Patelaki	Eleni Patelaki	
69.	989 Duncan	7513-028	BARBARA KLEMENTZ	BARBARA KLEMENTZ	
82.	5160 DH Blvd		Elisabeth Collins	Elisabeth Collins	Elisabeth Collins
70.	950 DUNCAN 208E	7517-148	WILLIAM BRASSFIELD	WILLIAM BRASSFIELD	William Brassfield
71.	950 DUNCAN 205E	7517-145	GARRETT HAYASHIDA	GARRETT HAYASHIDA	
72.	979 DUNCAN	7513-059 or 7513-058	PABLO AND REBECCA	PABLO SIGUENZA	Pablo Siguenza
73.	979 Duncan St	7513-059 or 7513-058	Pablo & Rebecca Siguenza	Rebecca Siguenza	
74.	5175 Diamond Heights Blvd #205	7518-061	Jaime Cid	Jaime Cid	
75.	5175 Diamond Hghts Blvd #207	7518-061	Kirk Livingston	Kirk Livingston	
76.	5173 Diamond Heights Blvd #119		Rebecca Weill	Rebecca Weill	
77.	951 Duncan St.	7518-054 7513-053	Selena Lew	Selena Lew	
78.	970 Duncan St Apt 305 F	7517-177	Kylie Rowe	Kylie Rowe	
79.	323 Amber	7513-005	William Lim	William Lim	

(All information provided is subject to public disclosure; personal information will not be redacted.)

80.	940 DUNCAN ST. D102	7517/098	SHANA SOULIS	SHANA SOULIS	
81.	970 DUNCAN ST F306	7517-178	FRANCES CUMMINGS	FRANCIS CUMMINGS	

Pursuant to Planning Code Section 308.1(b), the undersigned members of the Board of Supervisors believe that there is sufficient public interest and concern to warrant an appeal of the Planning Commission on Case No._____, a conditional use authorization regarding (address) _____, District_____. The undersigned members respectfully request the Clerk of the Board to calendar this item at the soonest possible date.

Supervisor Printed Name	Signature	Date

(Attach copy of Planning Commission's Decision)

(All information provided is subject to public disclosure; personal information will not be redacted.)

Ph: (626) 314-3821
Em: info@mitchtsailaw.com

Mitchell M. Tsai
Law Firm

139 S. Hudson Ave., Suite 200
Pasadena, California 91101

VIA E-MAIL AND IN PERSON

October 27, 2025

City and County of San Francisco
Clerk of the Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102

RE: Notice of Appeal and Reasons in Support of Granting the Appeal of the September 25, 2025 Planning Commission Approvals of the AT&T Monopole Facility Project at 350 Amber Dr., San Francisco, its Conditional Use Authorization, and Shadow Findings (#02024-004318CUA)

Honorable County Board of Supervisors:

On behalf of Diamond Heights Community Association, a non-profit corporation and a number of undersigned residents (collectively "**Appellant**"), my Office is submitting these appeal justifications in support of the Appellant's appeal of the San Francisco County's ("**County**") Planning Commission's September 25, 2025 Approval of the Conditional Use Authorization ("**CUA**") and associated Shadow Findings ("**Approvals**") related to the AT&T Monopole Facility proposed at 350 Amber Dr., San Francisco, CA ("**Project**"). Appellant is also separately appealing the Planning Commission's September 25, 2025 exemption of the Project from CEQA environmental review under the Class 3 categorical exemption for small structures.

The Appellant represents a group of concerned residents and property owners near the Project site, who have a strong interest in well-ordered land use planning and in addressing the environmental impacts of the Project and enforcing California and federal laws, as well as the local County/City regulations and the General Plan policies adopted for the protection of public health and safety, and the environment at large, including but not limited to the significant natural resources, such as the Glen Canyon Park adjacent to the Project, along with its sensitive biological resources.

In a nutshell, and among many other things, the Appellant and the community the Appellant represents are particularly concerned about the *safety* of the proposed

Project, in light of its *location*. First and foremost, the Project is proposed in the earthquake-induced *landslide zone* mapped by *both* the California Department of Conservation's California Earthquake Hazard Zone Map (Alquist-Priolo Map), as well as the local San Francisco Seismic Hazard Map, as detailed and shown further below. The Project site has a history of seismic failures. This translates into significant landslide and soil failure concerns about the 104-feet tall and 500 feet-base Project sliding down or causing a landslide near the residential areas, Glen Canyon Park and George Christopher Playground.

Second, the Project is proposed atop of 2 million cubic yards of dirt and rock taken from both hills and the park and Police Academy sit on is "infill", as evidenced by the County's own records. This suggests soil instability, the disturbance or seismic failure of which may affect the nearby homes, playground, and park, as well as the groundwaters which will be reached in order to secure the 104-feet monopole and its base in place.

Similarly, per the Project's *plans* presented to the Planning Commission on September 25, 2025, the Project is a 104-feet tall *monopine* – i.e., a 104-feet tower camouflaged as a pine tree with artificial branches and leaves. While all other documents presented to the County suggest that the wireless facility will *not* be a *monopine* and is solely a monopole, AT&T's presented plans speak differently.[1] There is ample evidence that such artificial trees pollute the environment with their plastic branches and leaves which fall off to the ground, stay on the ground, and decay, thus causing soil and groundwater contamination harmful to the public and the surrounding biological resources.

Third, there is ample direct expert evidence that wireless facilities similar to what the Project proposes are a significant fire hazard and have caused fires in multiple areas in

[1] Based on several other misrepresentations made by AT&T and its representatives (including those mentioned in this letter, *infra*), the County should question AT&T's statements and ultimate intentions and should secure a clear, unambiguous, accurate, stable, and finite Project description, including as to the nature, type, and precise location of the proposed wireless facility. Without such an accurate and unambiguous Project description, the County's assessment of the Project's environmental impacts and overall benefits, as well as the County's findings of consistency of the Project with various local rules and regulations are unsupported and will not pass judicial muster.

California. And yet, far from *mitigating* the fire hazard caused by the Project itself, the County approved the *siting* of such a significant fire hazard just next to a *grove* of *90-feet tall eucalyptus trees*, known for their fire-prone features. Simply put – in the highly foreseeable and likely event of a spark, electrical failure, or fire on the Project's proposed 104-feet wireless tower, or its 500 sf base, or its 30kw DC generator with a 190-gallon diesel fuel tank – the 90-feet eucalyptus trees in the grove will quickly catch fire and take it to the nearby residences, the Glen Canyon Park, George Christopher Playground, the Noe Valley Nursery School in the Playground and the nearby church which also houses a preschool, which would be nearly impossible to contain.

Fourth, the Project is proposed near – and will necessarily impact – the Glen Canyon Park on the southwest, which is one of San Francisco's 31 significant natural resource areas ("SNR"), a sensitive critical resource mapped and recognized by the County of San Francisco. The Glen Canyon Park is known for its rare wildlife species, as well as the wildlife corridor, which the County plans to link to other wildlife corridors in the County.

Similarly, the Project is proposed near the St. Nicholas Antiochian Orthodox Church on the northwest, which was built in 1965 and is a potential or presumed historical resource. The Project is also bordered by another public parks George Christopher Playground Noe Valley Preschool, a childcare center) to the south and east.

As such, the Project poses a direct threat to the environment, including public health and safety, San Francisco critical natural resources, and historical resources, in light of the Project's siting on a landslide zone, with a history of seismic failures, as well as the Project's fire hazards, which may have significant irreversible consequences in light of the nearby eucalyptus grove and open space.

Fifth, because of the above-noted *omissions* and failures of the Planning Commission to address and mitigate the critical public concerns and comments on the Project, the adopted findings to support the conditional use authorization or the shadow findings cannot be supported, as a matter of law.

Sixth and for the same reasons, the Planning Commission's findings of General Plan consistency are unsupported. In addition, the General Plan consistency findings are deficient as they leave out the Project's inconsistencies with the open space preservation and public health and safety policies under the General Plan and its Open Space and Safety Elements. As related, because of the Project's manifest

inconsistencies with the General Plan, it violates the State Planning and Zoning Law which requires both vertical consistency with the General Plan and also internal consistency between elements of the General Plan. Moreover, the Project is inconsistent with local zoning and height restrictions.

Notably, when approving the Project, the Planning Commission swept the above-noted critical concerns of the community and life and safety hazards under the rug, thereby showing its disregard of the rule of law and its duties of a public agency to investigate and disclose in good faith all that it possibly can, under the California Environmental Quality Act, State Planning and Zoning Law, and local Planning Code and General Plan of the San Francisco County.

The Planning Commission's Approvals also manifest its disregard for the critical life and safety of the Project's nearby residents, including children and elderly, who may be trapped in case of landslides or wildfires caused by the Project's massive size and features.

On behalf of the Appellant, we urge the Board of Supervisors to grant the appeal, to deny the Project before *any* action may be taken on the Project at the proposed location of 350 Amber Drive. We further urge the Board of Supervisors to require a full and detailed geotechnical examination of the Project Site, which, in addition, addresses the facts of historic seismic failures on the Project site.

The Appellant expressly reserves the right to supplement this letter with additional evidence and materials at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Appellant further incorporates by reference all the comments and concerns raised to date on the Project or its environmental CEQA clearance. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

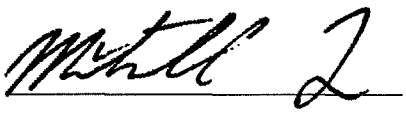
Moreover, the Appellant requests that the County provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act, (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning

Law (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. We further request that such notices be provided to us *also* in their *electronic form,* as soon as those become available.

In sum, Appellant urges the Board of Supervisors to meaningfully consider the public safety concerns, the critical seismic, landslide, fire, and chemical hazards to public health and safety and particularly to the most vulnerable children in the adjacent playground and residences, as well as to the environmentally sensitive and critical mapped resource of the Glen Canyon park and the Project's impacts on the park and its biological resources, the Project's mass and scale, its siting near fire-prone forest of Eucalyptus trees; the Project's incompatibility with the County's General Plan goals, objectives and policies, zoning, and height restrictions and the lack of a meaningful CEQA review, and to grant the appeal and deny the Project outright as a hazard to the nearby community.

If the County has any questions, please feel free to contact my Office.

Sincerely,



Mitchell M. Tsai
Attorney for Appellant

San Francisco Planning

49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
628.652.7600
www.sfplanning.org

PLANNING COMMISSION MOTION NO. 21825

HEARING DATE: SEPTEMBER 25, 2025

Record No.:	2024-004318CUA
Project Address:	350 Amber Drive
Zoning:	P (Public) Zoning District OS Height and Bulk District Central Neighborhoods Large Residence Special Use District Family and Senior Housing Opportunity Special Use District
Cultural District:	N/A
Block/Lot:	7521/005
Project Sponsor:	AT&T Wireless c/o Eric Lentz 5001 Executive Parkway San Ramon, CA 94583
Property Owner:	City and County of San Francisco 25 South Van Ness Ave Ste. 400 San Francisco, CA 94102
Staff Contact:	John Dacey – (628) 652-7415 john.dacey@sfgov.org

ADOPTING FINDINGS RELATING TO A CONDITIONAL USE AUTHORIZATION PURSUANT TO PLANNING CODE SECTIONS 211.2 AND 303, TO INSTALL A NEW AT&T MACRO WIRELESS TELECOMMUNICATIONS FACILITY ON AN APPROXIMATELY 104-FOOT-TALL MONOPOLE, CONSISTING OF (12) NEW ANTENNAS; (9) NEW REMOTE RADIO UNITS AND ANCILLARY EQUIPMENT. THE SUBJECT PROPERTY IS LOCATED AT 350 AMBER DRIVE, LOTS 005 IN ASSESSOR'S BLOCK 7521, WITHIN THE P (PUBLIC) ZONING DISTRICT AND OS HEIGHT AND BULK DISTRICT, AND ADOPTING FINDINGS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

PREAMBLE

On May 15, 2024, Eric Lentz, on behalf of AT&T Wireless (hereinafter "Project Sponsor") filed Application No. 2024-004318CUA (hereinafter "Application") with the Planning Department (hereinafter "Department") for a Conditional Use Authorization to install a new AT&T Wireless Macro Wireless Telecommunication Services Facility (hereinafter "Project") at 350 Amber Drive, Block 7521 Lots 005 (hereinafter "Project Site").

On May 29, 2025, the Project was determined to be exempt from the California Environmental Quality Act ("CEQA") as a Class 3 Categorical Exemption under CEQA as described in the determination contained in the Planning Department files for this Project.

On June 26, 2025, the San Francisco Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting on Conditional Use Authorization Application No. 2024-004318CUA and Shadow Analysis Application No. 2024-004318SHD and continued the hearing to July 24, 2025.

On July 24, 2025, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on Conditional Use Authorization Application No. 2024-004318CUA and Shadow Analysis Application No. 2024-004318SHD and continued the hearing to September 25, 2025.

On September 25, 2025, the Commission conducted a duly noticed public hearing at a regularly scheduled meeting on Conditional Use Authorization Application No. 2024-004318CUA and Shadow Analysis Application No. 2024-004318SHD.

The Planning Department Commission Secretary is the custodian of records; the File for Record No. 2024-004318CUA is located at 49 South Van Ness Avenue, Suite 1400, San Francisco, California.

The Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of the applicant, Department staff, and other interested parties.

MOVED, that the Commission hereby authorizes the Conditional Use Authorization as requested in Application No. 2024-004318CUA, subject to the conditions contained in "EXHIBIT A" of this motion, based on the following findings:

FINDINGS

Having reviewed the materials identified in the preamble above, and having heard all testimony and arguments, this Commission finds, concludes, and determines as follows:

1. **The above recitals are accurate and constitute findings of this Commission.**

2. **Project Description.** The Project proposes to install a new AT&T Macro Wireless Telecommunication Facility on an approximately 104-foot-tall monopole located at the rear of the San Francisco Police Academy. The WTS facility will consist of twelve (12) new antennas, nine (9) new remote radio units, three (3) tower mounted DC-9 surge suppressors, one (1) GPS unit mounted on a proposed outdoor equipment cabinet, one (1) walk-up cabinet, and one (1) 30kw DC generator with a 190-gallon diesel fuel tank on a concrete pad. The ancillary equipment will be surrounded by an 8' chain link fence.

3. **Site Description and Present Use.** The Project is located on Lot 005 of Assessor's Block 7521 (with a lot area of approximately 195,113 square feet), with frontage along Amber Drive to the northwest, Turquoise Way to the west and Duncan Street to the north. The property is owned by the City and under the jurisdiction of the Police Department. The Project Site contains three, one-to-two-story buildings, presently housing the San Francisco Police Academy.

4. **Surrounding Properties and Neighborhood.** The Project Site is located within the P (Public) Zoning District. The immediate context is mixed in character with residential, recreation, and institutional uses. The immediate neighborhood includes two-to-three-story residential development to the west and north,

a public park (Glen Canyon Park) to the southwest, St. Nicholas Orthodox Church to the northeast, and another public park (George Christopher Playground) to the south and east.

5. **Public Outreach and Comments.** The Project Sponsor held one community meeting regarding the Project on April 10, 2024. Seven community members attended the meeting in person and two community members attended remotely via zoom. Concerns were raised regarding potential impacts on public trails below the project site and 5G RF propagation. The Department has received 46 letters regarding the proposed project, with eight of those letters in support and 38 in opposition. The correspondence that expressed support for the project stated that existing wireless coverage in the neighborhood was poor and better service would improve emergency response times. The correspondence in opposition had concerns over the proximity of the facility to nearby parks and residential properties, the aesthetics of the structure, potential negative impacts on property values, potential fire risks, and possible health impacts from increased exposure to radio frequency radiation for residents in the area.

6. **Past History and Actions.** The Planning Commission adopted the *Wireless Telecommunications Services (WTS) Facilities Siting Guidelines* ("Guidelines") for the installation of wireless telecommunications facilities in 1996. These Guidelines set forth the land use policies and practices that guide the installation and approval of wireless facilities throughout San Francisco. A large portion of the Guidelines was dedicated to establishing location preferences for these installations. The Board of Supervisors, in Resolution No. 635-96, provided input as to where wireless facilities should be located within San Francisco. The Guidelines were updated by the Commission in 2003 and again in 2012, requiring community outreach, notification, and detailed information about the facilities to be installed.

   Section 8.1 of the Guidelines outlines Location Preferences for wireless facilities. There are five primary areas where the installation of wireless facilities should be located:

   1. Publicly-used Structures: such facilities as fire stations, utility structures, community facilities, and other public structures;

   2. Co-Location Site: encourages installation of facilities on buildings that already have wireless installations;

   3. Industrial or Commercial Structures: buildings such as warehouses, factories, garages, service stations;

   4. Industrial or Commercial Structures: buildings such as supermarkets, retail stores, banks; and

   5. Mixed-Use Buildings in High Density Districts: buildings such as housing above commercial or other non-residential space.

   Section 8.1 of the WTS Siting Guidelines further stipulates that the Planning Commission will not approve WTS applications for Preference 5 or below Location Sites unless the application describes (a) what publicly-used building, co-location site or other Preferred Location Sites are located within the geographic service area; (b) what good faith efforts and measures were taken to secure these more Preferred

Locations, (c) explains why such efforts were unsuccessful; and (d) demonstrates that the location for the site is essential to meet demands in the geographic service area and the Applicant's citywide networks.

Before the Planning Commission can review an application to install a wireless facility, the Project Sponsor must submit a five-year facilities plan, which must be updated biannually, an emissions report and approval by the Department of Public Health, Section 106 Declaration of Intent, an independent evaluation verifying coverage and capacity, a submittal checklist and details about the facilities to be installed.

Under Section 704(B)(iv) of the 1996 Federal Telecommunications Act, local jurisdictions cannot deny wireless facilities based on Radio Frequency (RF) radiation emissions so long as such facilities comply with the FCC's regulations concerning such emissions.

7. **Location Preference.** The *WTS Facilities Siting Guidelines* identify different types of zoning districts and building uses for the siting of wireless telecommunications facilities.

   Based on the zoning and land use, the proposed WTS facility is at a Location Preference 1 Site (Publicly-used Structures) according to the WTS Facilities Siting Guidelines, making it a desired location.

8. **Radio Waves Range.** The Project Sponsor has stated that the proposed wireless network is designed to address coverage and capacity needs in the area. The network will operate in the 6GHz, C-Band, 700, 850, 1900, 2100 and 2300 Megahertz (MHZ) bands, which are regulated by the Federal Communications Commission (FCC) and must comply with the FCC-adopted health and safety standards for electromagnetic radiation and radio frequency radiation.

9. **Radiofrequency (RF) Emissions:** The Project Sponsor retained Hammett & Edison, a radio engineering consulting firm, to prepare a report describing the expected RF emissions from the proposed facility. Pursuant to the Guidelines, the Department of Public Health reviewed the report and determined that the proposed facility complies with the standards set forth in the Guidelines.

10. **Department of Public Health Review and Approval.** The Project was referred to the Department of Public Health (DPH) for emissions exposure analysis. Radio-Frequency (RF) levels from the proposed AT&T transmitters at any nearby publicly accessible building or area would 11% of the FCC public exposure limit.

    There are no antennas existing operated by AT&T Wireless installed on the roof top of the building at 350 Amber Dr. Existing RF levels at ground level were around 1% of the FCC public exposure limit. No other antennas were observed within 100 feet of this site. AT&T Wireless proposes to install 12 new antennas. The antennas are mounted at a height of 103 feet above the ground. The estimated ambient RF field from the proposed AT&T Wireless transmitters at ground level is calculated to be 0.057 mW/sq cm., which is 8 % of the FCC public exposure limit. The three-dimensional perimeter of RF levels equal to the public exposure limit extends 116 feet and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 47 feet of the front of the antennas while they are in operation.

11. **Coverage and Capacity Verification.** The maps, data, and conclusion provided by AT&T to demonstrate the need for outdoor and indoor coverage and capacity have been determined by Hammet & Edison, an engineering consultant and independent third party, to accurately represent the carrier's present and post-installation conclusions.

12. **Maintenance Schedule.** The facility would operate without on-site staff but with a maintenance crew visiting the property to service and monitor the facility.

13. **Planning Code Compliance.** The Commission finds that the Project is consistent with the relevant provisions of the Planning Code in the following manner:

    A. **Use.** Per Planning Code Section 211.2, a Conditional Use Authorization is required for a WTS facility if used for commercial communication systems.

14. **Conditional Use Findings.** Planning Code Section 303 establishes criteria for the Planning Commission to consider when reviewing applications for Conditional Use authorization. On balance, the project complies with said criteria in that:

    A. The proposed new uses and building, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable, and compatible with, the neighborhood or the community.

    The Project at 350 Amber Drive is generally desirable and compatible with the surrounding neighborhood because the Project will not conflict with the existing uses of the property and will be designed to be compatible with the surrounding nature of the vicinity. The proposed monopole will be painted brown and located adjacent to a grove of Eucalyptus trees to minimize visual impacts. The overall location, setback from public streets, height and design of the proposed facility, including visible screening elements is situated so as to avoid intrusion into public vistas, and to ensure harmony with the existing neighborhood character and promote public safety.

    The Project is necessary in order to achieve sufficient indoor and outdoor 4G LTE mobile phone coverage and data capacity. Recent drive tests in the subject area conducted by the AT&T Mobility Radio Frequency Engineering Team provide that the Project Site is a preferable location, based on factors including quality of coverage and aesthetics.

    B. The proposed project will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity. There are no features of the project that could be detrimental to the health, safety or convenience of those residing or working the area, in that:

    (1) Nature of proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

    The proposal would not be detrimental to the health, safety, convenience, or general welfare of persons residing or working in the vicinity. The proposed antennas will be mounted on the

proposed 104-foot tall monopole. The associated equipment cabinets will be located behind the police academy and not visible from the public street.

(2) The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading;

The Planning Code does not require parking or loading for a telecommunications wireless facility. The proposed use is designed to meet the needs of the immediate neighborhood and should not generate significant amounts of vehicular trips from the immediate neighborhood or citywide.

(3) The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;

While some noise and dust may result from the installation of the antennas and transceiver equipment, noise or noxious emissions from continued use are not likely to be significantly greater than ambient conditions due to the operation of the wireless communication network.

(4) Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs;

The facility will not affect landscaping, open space, required parking, lighting or signage at the Project Site or surrounding area.

C. That the use as proposed will comply with the applicable provisions of the Planning Code and will not adversely affect the General Plan.

The Project complies with all relevant requirements and standards of the Planning Code and is consistent with objectives and policies of the General Plan as detailed below.

D. That the use as proposed would provide development that is in conformity with the purpose of the applicable Zoning District.

The Project at 350 Amber Drive is generally desirable and compatible with the surrounding neighborhood because the Project will not conflict with the existing uses of the property and will be designed to be compatible with the surrounding neighborhood. The overall location, setback from public streets, height and design of the proposed facility, are situated so as to avoid intrusion into public vistas, and to ensure harmony with the existing neighborhood character and promote public safety.

There is an existing coverage gap in the AT&T Mobility wireless telecommunications network caused by inadequate infrastructure in the area. A new facility is necessary to close the service coverage gap in the network area bordered by the intersection of Amber Drive and Turquoise Way, O'Shaughnessy Blvd to the south and west, and Diamond Heights Blvd to the east. This gap area includes numerous homes, businesses in the Diamond Heights Shopping Center, well-traveled

roads, Glen Canyon Park, St. Nicholas Antiochian Orthodox Church and other points of interest in the vicinity.

The Planning Code does not require parking or loading for a wireless telecommunications facility. The proposed use is designed to meet the needs of the immediate neighborhood and should not generate significant amounts of vehicular trips from the immediate neighborhood or citywide.

The Project is necessary in order to achieve sufficient indoor and outdoor 4G LTE mobile phone coverage and data capacity. Recent drive tests in the subject area conducted by the AT&T Mobility Radio Frequency Engineering Team provide that the Project Site is a preferable location, based on factors including quality of coverage and aesthetics.

The Project complies with all relevant requirements and standards of the Planning Code and is consistent with objectives and policies of the General Plan as detailed below.

15. **General Plan Compliance.** The Project is, on balance, consistent with the following Objectives and Policies of the General Plan:

RECREATION AND OPEN SPACE ELEMENT

Objectives and Policies

OBJECTIVE 1
ENSURE A WELL-MAINTAINED, HIGHLY UTILIZED, AND INTEGRATED OPEN SPACE SYSTEM

Policy 1.10
Ensure that open space is safe and secure for the City's entire population.

The Project will improve AT&T's coverage and capacity within George Christopher Playground and Glen Canyon Park, and in the Diamond Heights neighborhood.

COMMERCE AND INDUSTRY ELEMENT

Objectives and Policies

OBJECTIVE 1
MANAGE ECONOMIC GROWTH AND CHANGE TO ENSURE ENHANCEMENT OF THE TOTAL CITY LIVING AND WORKING ENVIRONMENT.

Policy 1.1
Encourage development, which provides substantial net benefits and minimizes undesirable consequences. Discourage development, which has substantial undesirable consequences that cannot be mitigated.

The Project will enhance the total city living and working environment by providing communication services for residents and workers within the City. Additionally, the Project would comply with Federal, State and Local performance standards.

OBJECTIVE 2
MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL STRUCTURE FOR THE CITY.

Policy 2.1
Seek to retain existing commercial and industrial activity and to attract new such activity to the city.

Policy 2.3
Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location.

The Site will be an integral part of a new wireless communications network that will enhance the City's diverse economic base.

OBJECTIVE 4
IMPROVE THE VIABILITY OF EXISTING INDUSTRY IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY.

Policy 4.1
Maintain and enhance a favorable business climate in the City.

Policy 4.2
Promote and attract those economic activities with potential benefit to the City.

The Project will benefit the City by enhancing the business climate through improved communication services for residents and workers.

COMMUNITY SAFETY ELEMENT

Objectives and Policies

OBJECTIVE 3
ESTABLISH STRATEGIES TO ADDRESS THE IMMEDIATE EFFECTS OF A DISASTER.

Policy 1.20
Increase communication capabilities in preparation for all phases of a disaster and ensure communication abilities extend to hard-to-reach areas and special populations.

Policy 2.4
Bolster the Department of Emergency Management's role as the City's provider of emergency planning and communication, and prioritize its actions to meet the needs of San Francisco.

Policy 2.15
Utilize advancing technology to enhance communication capabilities in preparation for all phases of a disaster, particularly in the high-contact period immediately following a disaster.

Policy 3.7
Develop a system to convey personalized information during and immediately after a disaster.

The Project will enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services.

16. **Planning Code Section 101.1(b)** establishes eight priority-planning policies and requires review of permits for consistency with said policies. On balance, the project complies with said policies in that:

    A. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses be enhanced.

    The wireless communications network will enhance personal communication services for businesses and customers in the surrounding area.

    B. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.

    No residential uses will be displaced or altered in any way by the granting of this Authorization.

    C. That the City's supply of affordable housing be preserved and enhanced,

    The Project will have no adverse effect on housing in the vicinity.

    D. That commuter traffic not impede MUNI transit service or overburden our streets or neighborhood parking.

    Due to the nature of the Project and minimal maintenance or repair, municipal transit service will not be significantly impeded and neighborhood parking will not be overburdened.

    E. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced.

    The Project will not cause any displacement of industrial and service sector activity.

    F. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake.

The Project will be designed and will be constructed to conform to the structural and seismic safety requirements of the Building Code. This proposal will not impact the property's ability to withstand an earthquake.

G. That landmarks and historic buildings be preserved.

Currently, the Project Site does not contain any City Landmarks or historic buildings.

H. That our parks and open space and their access to sunlight and vistas be protected from development.

Although the Project does cast additional shadow on two adjacent public parks (George Christopher Playground and Glen Canyon Park), both parks are still afforded access to sunlight, and any additional shadows should not dramatically affect the use and enjoyment of either park. A study of the shadow impacts as required per Planning Code Section 295 was completed. The Recreation and Park Commission reviewed the shadow analysis and issued a resolution recommending to the Planning Commission that the Project will not have significant adverse impact on the use of either park.

17. The Project is consistent with and would promote the general and specific purposes of the Code provided under Section 101.1(b) in that, as designed, the Project would contribute to the character and stability of the neighborhood and would constitute a beneficial development.

18. The Commission hereby finds that approval of the Conditional Use Authorization would promote the health, safety and welfare of the City.

DECISION

That based upon the Record, the submissions by the Applicant, the staff of the Department and other interested parties, the oral testimony presented to this Commission at the public hearings, and all other written materials submitted by all parties, the Commission hereby **APPROVES Conditional Use Authorization Application No. 2024-004318CUA** subject to the following conditions attached hereto as "EXHIBIT A" in general conformance with plans on file, dated February 6, 2024, and stamped "EXHIBIT B", which is incorporated herein by reference as though fully set forth.

APPEAL AND EFFECTIVE DATE OF MOTION: Any aggrieved person may appeal this Conditional Use Authorization to the Board of Supervisors within thirty (30) days after the date of this Motion. The effective date of this Motion shall be the date of this Motion if not appealed (after the 30-day period has expired) OR the date of the decision of the Board of Supervisors if appealed to the Board of Supervisors. For further information, please contact the Board of Supervisors at (415) 554-5184, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102.

Protest of Fee or Exaction: You may protest any fee or exaction subject to Government Code Section 66000 that is imposed as a condition of approval by following the procedures set forth in Government Code Section 66020. The protest must satisfy the requirements of Government Code Section 66020(a) and must be filed within 90 days of the date of the first approval or conditional approval of the development referencing the challenged fee or exaction. For purposes of Government Code Section 66020, the date of imposition of the fee shall be the date of the earliest discretionary approval by the City of the subject development.

If the City has not previously given Notice of an earlier discretionary approval of the project, the Planning Commission's adoption of this Motion, Resolution, Discretionary Review Action or the Zoning Administrator's Variance Decision Letter constitutes the approval or conditional approval of the development and the City hereby gives **NOTICE** that the 90-day protest period under Government Code Section 66020 has begun. If the City has already given Notice that the 90-day approval period has begun for the subject development, then this document does not re-commence the 90-day approval period.

I hereby certify that the Planning Commission ADOPTED the foregoing Motion on September 25, 2025.

Jonas P. Ionin
Commission Secretary

AYES:	Campbell, McGarry, Braun, So
NAYS:	Williams, Imperial, Moore
ABSENT:	None
ADOPTED:	September 25, 2025

EXHIBIT A

Authorization

This authorization is for a conditional use to allow a Wireless Telecommunication Facility(d.b.a. AT&T Wireless) located at 350 Amber Drive, Block 7521, and Lot 005 pursuant to Planning Code Section(s) 211.2 and 303 within the P (Public) District and a OS Height and Bulk District; in general conformance with plans, dated February 6, 2024, and stamped "EXHIBIT B" included in the docket for Record No. 2024-004318CUA and subject to conditions of approval reviewed and approved by the Commission on September 25, 2025 under Motion No. **21825**. This authorization and the conditions contained herein run with the property and not with a particular Project Sponsor, business, or operator.

Recordation of Conditions of Approval

Prior to the issuance of the building permit or commencement of use for the Project the Zoning Administrator shall approve and order the recordation of a Notice in the Official Records of the Recorder of the City and County of San Francisco for the subject property. This Notice shall state that the project is subject to the conditions of approval contained herein and reviewed and approved by the Planning Commission on **September 25, 2025** under Motion No. **21825.**

Severability

The Project shall comply with all applicable City codes and requirements. If any clause, sentence, section or any part of these conditions of approval is for any reason held to be invalid, such invalidity shall not affect or impair other remaining clauses, sentences, or sections of these conditions. This decision conveys no right to construct, or to receive a building permit. "Project Sponsor" shall include any subsequent responsible party.

Changes and Modifications

Changes to the approved plans may be approved administratively by the Zoning Administrator. Significant changes and modifications of conditions shall require Planning Commission approval of a new Conditional Use authorization.

CONDITIONS OF APPROVAL, COMPLIANCE, MONITORING, AND REPORTING

Performance

1. **Validity.** The authorization and right vested by virtue of this action is valid for three (3) years from the effective date of the Motion. The Department of Building Inspection shall have issued a Building Permit or Site Permit to construct the project and/or commence the approved use within this three-year period.

   For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

2. **Expiration and Renewal.** Should a Building or Site Permit be sought after the three (3) year period has lapsed, the project sponsor must seek a renewal of this Authorization by filing an application for an amendment to the original Authorization or a new application for Authorization. Should the project sponsor decline to so file, and decline to withdraw the permit application, the Commission shall conduct a public hearing in order to consider the revocation of the Authorization. Should the Commission not revoke the Authorization following the closure of the public hearing, the Commission shall determine the extension of time for the continued validity of the Authorization.

   For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

3. **Diligent Pursuit.** Once a site or Building Permit has been issued, construction must commence within the timeframe required by the Department of Building Inspection and be continued diligently to completion. Failure to do so shall be grounds for the Commission to consider revoking the approval if more than three (3) years have passed since this Authorization was approved.

   For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

4. **Extension.** All time limits in the preceding three paragraphs may be extended at the discretion of the Zoning Administrator where implementation of the project is delayed by a public agency, an appeal or a legal challenge and only by the length of time for which such public agency, appeal or challenge has caused delay.

   For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

5. **Conformity with Current Law.** No application for Building Permit, Site Permit, or other entitlement shall be approved unless it complies with all applicable provisions of City Codes in effect at the time of such approval.

   For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

Design – Compliance at Plan Stage

6. **Final Materials.** The Project Sponsor shall continue to work with Planning Department on the building design. Final materials, glazing, color, texture, landscaping, and detailing shall be subject to Department staff review and approval. The architectural addenda shall be reviewed and approved by the Planning Department prior to issuance.

   For information about compliance, contact the Case Planner, Planning Department at 628.652.7415, www.sfplanning.org

7. **Plan Drawings - WTS.** Prior to the issuance of any building or electrical permits for the installation of the facilities, the Project Sponsor shall submit final scaled drawings for review and approval by the Planning Department ("Plan Drawings"). The Plan Drawings shall describe:

   A. **Structure and Siting.** Identify all facility related support and protection measures to be installed. This includes, but is not limited to, the location(s) and method(s) of placement, support, protection, screening, paint and/or other treatments of the antennas and other appurtenances to ensure public safety, ensure compatibility with urban design, architectural and historic preservation principles, and harmony with neighborhood character.

   B. **For the Project Site,** regardless of the ownership of the existing facilities. Identify the location of all existing antennas and facilities; and identify the location of all approved (but not installed) antennas and facilities.

   C. **Emissions.** Provide a report, subject to approval of the Zoning Administrator, that operation of the facilities in addition to ambient RF emission levels will not exceed adopted FCC standards with regard to human exposure in uncontrolled areas.

   For information about compliance, contact the Case Planner, Planning Department at 628.652.7415 www.sfplanning.org

8. **Screening - WTS.** To the extent necessary to ensure compliance with adopted FCC regulations regarding human exposure to RF emissions, and upon the recommendation of the Zoning Administrator, the Project Sponsor shall:

   A. Modify the placement of the facilities;

   B. Install fencing, barriers or other appropriate structures or devices to restrict access to the facilities;

   C. Install multi-lingual signage, including the RF radiation hazard warning symbol identified in ANSI C95.2 1982, to notify persons that the facility could cause exposure to RF emissions;

   D. Implement any other practice reasonably necessary to ensure that the facility is operated in compliance with adopted FCC RF emission standards.

E. To the extent necessary to minimize visual obtrusion and clutter, installations shall conform to the following standards:

F. Antennas and back up equipment shall be painted, fenced, landscaped or otherwise treated architecturally so as to minimize visual effects;

G. Rooftop installations shall be setback such that back up facilities are not viewed from the street;

H. Antennae attached to building facades shall be so placed, screened or otherwise treated to minimize any negative visual impact; and

I. Although co location of various companies' facilities may be desirable, a maximum number of antennas and back up facilities on the Project Site shall be established, on a case by case basis, such that "antennae farms" or similar visual intrusions for the site and area is not created.

For information about compliance, contact the Case Planner, Planning Department at 628.652.7415, www.sfplanning.org

Monitoring - After Entitlement

9. **Enforcement.** Violation of any of the Planning Department conditions of approval contained in this Motion or of any other provisions of Planning Code applicable to this Project shall be subject to the enforcement procedures and administrative penalties set forth under Planning Code Section 176 or Section 176.1. The Planning Department may also refer the violation complaints to other city departments and agencies for appropriate enforcement action under their jurisdiction.

   For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

10. **Revocation due to Violation of Conditions.** Should implementation of this Project result in complaints from interested property owners, residents, or commercial lessees which are not resolved by the Project Sponsor and found to be in violation of the Planning Code and/or the specific conditions of approval for the Project as set forth in Exhibit A of this Motion, the Zoning Administrator shall refer such complaints to the Commission, after which it may hold a public hearing on the matter to consider revocation of this authorization.

    For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

11. **Implementation Costs - WTS.** The Project Sponsor, on an equitable basis with other WTS providers, shall pay the cost of preparing and adopting appropriate General Plan policies related to the placement of WTS facilities. Should future legislation be enacted to provide for cost recovery for planning, the Project Sponsor shall be bound by such legislation.

    The Project Sponsor or its successors shall be responsible for the payment of all reasonable costs associated with implementation of the conditions of approval contained in this authorization, including costs incurred

by this Department, the Department of Public Health, the Department of Technology, Office of the City Attorney, or any other appropriate City Department or agency. The Planning Department shall collect such costs on behalf of the City.

The Project Sponsor shall be responsible for the payment of all fees associated with the installation of the subject facility, which are assessed by the City pursuant to all applicable law.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

12. **Implementation and Monitoring - WTS.** In the event that the Project implementation report includes a finding that RF emissions for the site exceed FCC Standards in any uncontrolled location, the Zoning Administrator may require the Applicant to immediately cease and desist operation of the facility until such time that the violation is corrected to the satisfaction of the Zoning Administrator.

    For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

13. **Project Implementation Report - WTS.** The Project Sponsor shall prepare and submit to the Zoning Administrator a Project Implementation Report. The Project Implementation Report shall:

    A. Identify the three dimensional perimeter closest to the facility at which adopted FCC standards for human exposure to RF emissions in uncontrolled areas are satisfied;

    B. Document testing that demonstrates that the facility will not cause any potential exposure to RF emissions that exceed adopted FCC emission standards for human exposure in uncontrolled areas.

    C. The Project Implementation Report shall compare test results for each test point with applicable FCC standards. Testing shall be conducted in compliance with FCC regulations governing the measurement of RF emissions and shall be conducted during normal business hours on a non-holiday weekday with the subject equipment measured while operating at maximum power.

    D. Testing, Monitoring, and Preparation. The Project Implementation Report shall be prepared by a certified professional engineer or other technical expert approved by the Department. At the sole option of the Department, the Department (or its agents) may monitor the performance of testing required for preparation of the Project Implementation Report. The cost of such monitoring shall be borne by the Project Sponsor pursuant to the condition related to the payment of the City's reasonable costs.

    E. Notification and Testing. The Project Implementation Report shall set forth the testing and measurements undertaken pursuant to Conditions 2 and 4.

    F. Approval. The Zoning Administrator shall request that the Certification of Final Completion for operation of the facility not be issued by the Department of Building Inspection until such time that the Project Implementation Report is approved by the Department for compliance with these conditions.

For information about compliance, contact the Environmental Health Section, Department of Public Health at 415.252.3800, www.sfdph.org

14. **Coverage and Capacity Verification.** Use is authorized as long as an independent evaluator, selected by the Planning Department, determines that the information and conclusions submitted by the wireless service provider in support of its request for conditional use are accurate. The wireless service provider shall fully cooperate with the evaluator and shall provide any and all data requested by the evaluator to allow the evaluator to verify that the maps, data, and conclusions about service coverage and capacity submitted are accurate. The wireless service provider shall bear all costs of said evaluation. The independent evaluator, upon request by the wireless service provider shall keep the submitted data confidential and shall sign a confidentiality agreement acceptable to the wireless service provider. The independent evaluator shall be a professional engineer licensed by the State of California.

    For information about compliance, contact the Case Planner, Planning Department at 628.652.7415, www.sfplanning.org

15. **Notification prior to Project Implementation Report - WTS.** The Project Sponsor shall undertake to inform and perform appropriate tests for residents of any dwelling units located within 25 feet of the transmitting antenna at the time of testing for the Project Implementation Report.

    A. At least twenty calendar days prior to conducting the testing required for preparation of the Project Implementation Report, the Project Sponsor shall mail notice to the Department, as well as to the resident of any legal dwelling unit within 25 feet of a transmitting antenna of the date on which testing will be conducted. The Applicant will submit a written affidavit attesting to this mail notice along with the mailing list.

    B. When requested in advance by a resident notified of testing pursuant to subsection (a), the Project Sponsor shall conduct testing of total power density of RF emissions within the residence of that resident on the date on which the testing is conducted for the Project Implementation Report.

    For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

16. **Installation - WTS.** Within 10 days of the installation and operation of the facilities, the Project Sponsor shall confirm in writing to the Zoning Administrator that the facilities are being maintained and operated in compliance with applicable Building, Electrical and other Code requirements, as well as applicable FCC emissions standards.

    For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

17. **Periodic Safety Monitoring - WTS.** The Project Sponsor shall submit to the Zoning Administrator 10 days after installation of the facilities, and every two years thereafter, a certification attested to by a licensed engineer expert in the field of EMR/RF emissions, that the facilities are and have been operated within the then current applicable FCC standards for RF/EMF emissions.

For information about compliance, contact the Environmental Health Section, Department of Public Health at 415.252.3800, www.sfdph.org

Operation

18. **Community Liaison.** Prior to issuance of a building permit to construct the project and implement the approved use, the Project Sponsor shall appoint a community liaison officer to deal with the issues of concern to owners and occupants of nearby properties. The Project Sponsor shall provide the Zoning Administrator and all registered neighborhood groups for the area with written notice of the name, business address, and telephone number of the community liaison. Should the contact information change, the Zoning Administrator and registered neighborhood groups shall be made aware of such change. The community liaison shall report to the Zoning Administrator what issues, if any, are of concern to the community and what issues have not been resolved by the Project Sponsor.

    For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

19. **Out of Service – WTS.** The Project Sponsor or Property Owner shall remove antennae and equipment that has been out of service or otherwise abandoned for a continuous period of six months.

    For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

20. **Emissions Conditions – WTS.** It is a continuing condition of this authorization that the facilities be operated in such a manner so as not to contribute to ambient RF/EMF emissions in excess of then current FCC adopted RF/EMF emission standards; violation of this condition shall be grounds for revocation.

    For information about compliance, contact the Environmental Health Section, Department of Public Health at 415.252.3800, www.sfdph.org

21. **Noise and Heat – WTS.** The WTS facility, including power source and cooling facility, shall be operated at all times within the limits of the San Francisco Noise Control Ordinance. The WTS facility, including power source and any heating/cooling facility, shall not be operated so as to cause the generation of heat that adversely affects a building occupant.

    For information about compliance, contact the Environmental Health Section, Department of Public Health at 415.252.3800, www.sfdph.org

22. **Transfer of Operation – WTS.** Any carrier/provider authorized by the Zoning Administrator or by the Planning Commission to operate a specific WTS installation may assign the operation of the facility to another carrier licensed by the FCC for that radio frequency provided that such transfer is made known to the Zoning Administrator in advance of such operation, and all conditions of approval for the subject installation are carried out by the new carrier/provider.

For information about compliance, contact Code Enforcement, Planning Department at 628.652.7463, www.sfplanning.org

23. **Compatibility with City Emergency Services – WTS.** The facility shall not be operated or caused to transmit on or adjacent to any radio frequencies licensed to the City for emergency telecommunication services such that the City's emergency telecommunications system experiences interference, unless prior approval for such has been granted in writing by the City.

For information about compliance, contact the Department of Technology, 415.581.4000, http://sfgov3.org/index.aspx?page=1421

AT&T SITE NUMBER: CCL05350
AT&T SITE NAME: SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131
JURISDICTION: CITY OF SAN FRANCISCO
APN: 7521005

SITE TYPE: OUTDOOR / MONOPOLE

INITIATIVE/PROJECT: NSB
USID #: 330307
FA LOCATION CODE: 15906588
RFDS ID: RFDS-1702
RFDS VERSION: 1.00
RFDS DATE: 01/26/2024
PACE JOB #: MRSFR095386
PTN #: 3701A15N2L

PROJECT DESCRIPTION

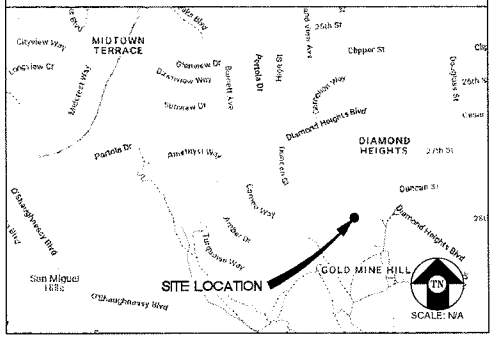
A (N) AT&T UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF INSTALLING:

- INSTALLATION OF A 20'-0" X 27'-6" AT&T TELECOMMUNICATIONS FACILITY (~550 SQ. FT.)
- INSTALLATION OF A AT&T 103'-0" MONOPOLE
- INSTALLATION OF A AT&T 8' CHAIN LINK FENCE
- INSTALLATION OF (2) AT&T 8' WIDE AND (1) 4' WIDE CHAIN LINK GATES
- INSTALLATION OF AT&T ANTENNA MOUNTING ASSEMBLIES AT A 100'-0" CENTERLINE
- INSTALLATION OF (12) AT&T PANEL ANTENNAS MOUNTED AT A 100'-0" CENTERLINE ((4) PER SECTOR)
- INSTALLATION OF (9) AT&T REMOTE RADIO UNITS (RRUS) ((3) PER SECTOR)
- INSTALLATION OF (3) AT&T TOWER MOUNTED DC-9 SURGE SUPPRESSORS
- INSTALLATION OF (1) FIRSTNET BY AT&T GPS UNIT MOUNTED ON PROPOSED OUTDOOR EQUIPMENT CABINET
- INSTALLATION OF (1) WALK-UP CABINET (WAC) EQUIPMENT CABINET
- INSTALLATION OF A NEW AT&T 30KW DC GENERATOR WITH 190 GALLON DIESEL FUEL TANK ON A NEW 5'-0" X 9'-0" CONCRETE PAD
- NEW FIBER CONDUIT RUN TO FIBER CABINET
- INSTALLATION OF (1) AT&T CIENA AND (1) HOFFMAN BOX MOUNTED TO A NEW H-FRAME

PROJECT INFORMATION

SITE NAME:	SF POLICE ACADEMY	SITE ACQUISITION COMPANY:	MODUS LLC 249 STOCKTON STREET SAN FRANCISCO, CALIFORNIA 94108
SITE #:	CCL05350		
COUNTY:	SAN FRANCISCO COUNTY	LEASING CONTACT:	ATTN: LORRIE BILLALON (510) 825-8889 LBILLALON@MODUSLLC.COM
JURISDICTION:	CITY OF SAN FRANCISCO		
APN:	7521005	ZONING CONTACT:	ATTN: CAROLINE STYC (516) 861-3585 CSTYC@MODUSLLC.COM
SITE ADDRESS:	350 AMBER DRIVE SAN FRANCISCO, CALIFORNIA 94112		
CURRENT ZONING:	PUBLIC (P)	CONSTRUCTION CONTACT:	ATTN: KEITH CONNER (408) 306-3801 GKCONNER@BECHTEL.COM
CONSTRUCTION TYPE:	V-B		
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)		
POWER:	PG&E		
LATITUDE:	N 37° 44' 37.8" NAD 83 N 37.743820° NAD 83		
LONGITUDE:	W 122° 26' 19.7" NAD 83 W -122.441591° NAD 83		
GROUND ELEVATION:	±554.0' AMSL		
PROPERTY OWNER:	CITY & COUNTY OF SAN FRANCISCO 25 VAN NESS AVENUE, STE. 400 SAN FRANCISCO, CALIFORNIA 94102		
APPLICANT:	AT&T MOBILITY 5001 EXECUTIVE PARKWAY SAN RAMON, CALIFORNIA 94583		

VICINITY MAP



DRIVING DIRECTIONS

FROM: 5001 EXECUTIVE PARKWAY, SAN RAMON, CALIFORNIA 94583
TO: 350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

HEAD NORTH	82 FT
TURN RIGHT	0.2 MI
TURN RIGHT TOWARD EXECUTIVE PKWY	265 FT
TURN RIGHT ONTO EXECUTIVE PKWY	0.2 MI
TURN LEFT ONTO CAMINO RAMON	0.8 MI
USE THE LEFT 2 LANES TO TURN LEFT ONTO CROW CANYON RD	0.2 MI
USE THE RIGHT 2 LANES TO MERGE ONTO I-680 N VIA THE RAMP TO SACRAMENTO	0.4 MI
MERGE ONTO I-680 N	9.2 MI
USE THE RIGHT 2 LANES TO TAKE EXIT 46A FOR STATE ROUTE 24 TOWARD OAKLAND/LAFAYETTE	1.1 MI
CONTINUE ONTO CA-24 W	8.1 MI
KEEP LEFT AT THE FORK TO STAY ON CA-24 W	4.3 MI
USE THE RIGHT 2 LANES TO TAKE EXIT 2B TO MERGE ONTO I-580 W TOWARD SAN FRANCISCO	1.5 MI
USE THE LEFT 3 LANES TO TAKE EXIT 19A TO MERGE ONTO I-80 W TOWARD SAN FRANCISCO	8.5 MI
MERGE ONTO US-101 S	2.0 MI
USE THE RIGHT 2 LANES TO TAKE EXIT 431 TO MERGE ONTO I-280 S TOWARD DALY CITY	1.6 MI
TAKE EXIT 52 FOR MONTEREY BLVD	0.2 MI
TURN RIGHT ONTO MONTEREY BLVD	0.1 MI
CONTINUE ONTO DIAMOND ST	0.4 MI
TURN LEFT TO STAY ON DIAMOND ST	0.2 MI
TURN RIGHT TO STAY ON DIAMOND ST	226 FT
TURN RIGHT ONTO DIAMOND HEIGHTS BLVD	0.8 MI
TURN LEFT ONTO DUNCAN ST	344 FT
TURN LEFT ONTO AMBER DR	72 FT
TURN LEFT	184 FT
TURN LEFT	23 FT
TURN RIGHT	279 FT
TURN RIGHT	161 FT
DESTINATION WILL BE ON THE LEFT	

ESTIMATED TIME: 1 HOUR 2 MINUTES ESTIMATED DISTANCE: 40.1 MILES

CODE COMPLIANCE

ALL WORK & MATERIALS SHALL BE PERFORMED & INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO H=THESE CODES:

2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, VOLUME 1&2, TITLE 24 C.C.R.
(2021 INTERNATIONAL BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R.
(2021 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
2021 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
(2021 INTERNATIONAL FIRE CODE AND 2023 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
2022 CALIFORNIA REFERENCE STANDARDS, PART 12 TITLE 24 C.C.R.
ANSI/EIA-TIA-222-H
ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS.

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE, TITLE 24 PART 2, SECTION 118-203.5

SHEET INDEX

SHEET NO.	DESCRIPTION	REV
T-1	TITLE SHEET	0
T-2	SITE SIGNAGE	0
C-1	SITE SURVEY	0
A-1	OVERALL SITE PLAN	0
A-1.1	ENLARGED SITE PLAN	0
A-2	SITE DETAIL	0
A-2.1	SITE DETAIL WITH DIMENSIONS	0
A-3	ANTENNA LAYOUT AND EQUIPMENT SCHEDULE	0
A-4	NORTHEAST AND SOUTHEAST ELEVATIONS	0
A-5	SOUTHWEST AND NORTHWEST ELEVATIONS	0
D-1	EQUIPMENT DETAILS	0
D-2	EQUIPMENT DETAILS	0
E-1	UTILITY ROUTING, PANEL SCHEDULE, SINGLE LINE DIAGRAM AND NOTES	0

PROJECT INFORMATION:
CCL05350
SF POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR
at&t
5001 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:
SPECTRUM
A Nextlogic Company
SPECTRUM SERVICES, LLC
4850 WEST OQUENDO ROAD
LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
FAX: (702) 367-8733

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	02/06/24	100% ZONING	R.C.

LICENSURE:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET TITLE:
TITLE SHEET

SHEET NUMBER
T-1

at&t

This Site Operated by:
AT&T MOBILITY
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583
IN CASE OF FIRE AND THE NEED FOR SHUTDOWN
TO ACTIVATE ANTENNAS CALL THE
FOLLOWING NUMBER:
For 24 Hour Emergency Contact and Access Please Call:
(800) 638-2822

Reference Site#: CCL05350
Site Address: 350 AMBER DRIVE, SAN FRANCISCO, CA 94131

FENCE COMPOUND SIGNAGE | SCALE: NONE | 11

FOR FUEL & OTHER
ENVIRONMENTAL
EMERGENCIES
CALL EH&S
1-800-566-9347
1-800-KNOW-EHS

YELLOW EH&S SIGN | SCALE: NONE | 7

WARNING
CANCER AND REPRODUCTIVE HARM
WWW.P65WARNINGS.CA.GOV

AVERTISSEMENT
CANCER ET EFFET NOCIF SUR IS REPRODUCTION
WWW.P65WARNINGS.CA.GOV

AVERTISSEMENT
PRODUCE CANDER Y DANCS REPRODUCTIVOS
WWW.P65WARNINGS.CA.GOV

PROP 65 | SCALE: NONE | 5

SIGNAGE AND STRIPING INFORMATION

1. THE FOLLOWING INFORMATION IS A GUIDELINE WITH RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATIONS SHOULD BE IN CONNECT WITH ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
2. THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 1mWcm^2 AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5mWcm^2.
3. IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR WORKING PLATFORM LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
4. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS, THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF THE SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
5. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS, THE EXACT EXTENT OF THE BARRICADES & STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINES FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
6. ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN SHALL BE PROVIDED TO THE CONTRACTOR Y THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED IN PLAIN SIGHT AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES. THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS SHALL HAVE AT&T'S NAME AND THE COMPANY CONTACT INFORMATION (e.g. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
7. PHOTOS OF ALL STRIPING, BARRICADES AND SIGNAGE SHALL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE WITH FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS-HATCH PATTERN AS DETAILED BY THE CONSTRUCTION DRAWINGS. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO AS NOT TO BLOCK OR INTERFERE WITH THE OPERATION OF THE ANTENNAS. BARRICADES SHALL BE PAINTED WITH FADE RESISTANT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE WITH ALL RF FRIENDLY BARRICADES NEEDED, & SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER WITH A DETAILED SHOP DRAWING OF EACH BARRICADES. UPON CONSTRUCTION COMPLETION.

GENERAL NOTES | SCALE: NONE | 2

DANGER
NO
TRESPASSING

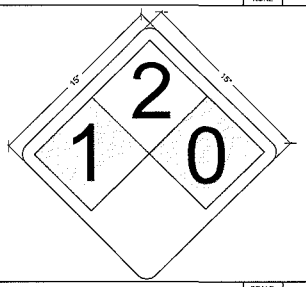
FENCED COMPOUND SIGNAGE | SCALE: NONE | 14

INFORMATION
Federal Communications Communication Tower
Registration Number
1 2 3 4 5 6 7
Posted in accordance with Federal Communications
Commission rules and antenna tower registration
47CFR 17.4 (g).
12"
8"

FCC ASR SIGNAGE | SCALE: NONE | 10

DIESEL FUEL
COMBUSTIBLE
NO SMOKING
NO OPEN FLAMES
FUEL TANK CAPACITY 190 GALS

FUEL TYPE SIGN | SCALE: NONE | 6



NFPA 704 HAZARD DIAMOND SIGN | SCALE: NONE | 4

NOTICE
AUTHORIZED
PERSONNEL
ONLY

DOOR / EQUIPMENT SIGN | SCALE: NONE | 13

Property of AT&T
Authorized
Personnel Only
No Trespassing
Violators will be prosecuted
In case of emergency, or prior to performing maintenance on this site, call (800) 638-2822 and reference cell site number CCL05350

GATE SIGNAGE | SCALE: NONE | 9

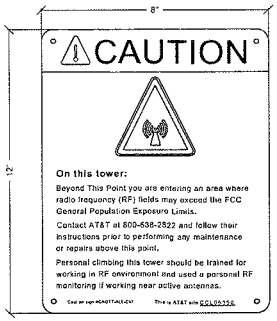
NOTE
1. CONTRACTOR SHALL INSTALL ALL INFORMATION SIGNAGE IN ACCORDANCE W/ AT&T WIRELESS DOCUMENT #03-0074, RF EXPOSURE POLICY AND RF SAFETY COMPLIANCE PROGRAM, LATEST EDITION.
2. CONTRACTOR SHALL CONTACT AT&T R-RFSC FOR INFORMATION ON MPE LEVELS AND INSTRUCTIONS ON LEVEL AND LOCATION OF SIGNAGE.

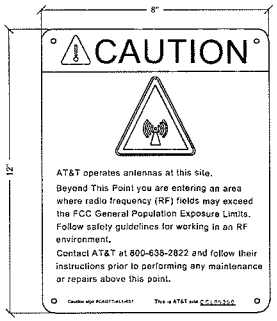


NFPA HAZARD SIGN | SCALE: NONE | 12

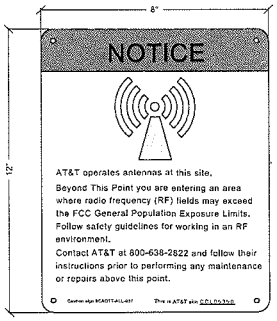
Property of AT&T
Authorized
Personnel Only
In case of emergency, or prior to performing maintenance on this site, call (800) 638-2822 and reference cell site number CCL05350

CABINET DOORS SIGNAGE | SCALE: NONE | 8





CAUTION AND WARNING SIGN | SCALE: NONE | 3



NOTICE SIGN | SCALE: NONE | 1

PROJECT INFORMATION:
CCL05350
SF POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR
at&t
5001 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:
SPECTRUM
A Nextedge Company
SPECTRUM SERVICES, LLC
4880 WEST QUEENIO ROAD
LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
FAX: (702) 367-8733

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	02/05/24	100% ZONING	R.C.

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SHEET TITLE:
SITE SIGNAGE

SHEET NUMBER
T-2

BASIS OF BEARINGS

THE BEARINGS ARE BASED UPON CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD 83

BENCHMARK:

TRIMBLE R10 2 GPS SYSTEM WAS USED TO OBSERVE ONSITE CONTROL. DATA PROCESSED THROUGH NATIONAL GEODETIC SURVEY'S ONLINE POSITIONING USER SERVICE TO OBTAIN STATE PLANE COORDINATES AND LATITUDE AND LONGITUDE (NAD 83) ALONG WITH ELEVATIONS (NAVD 88).

NOTES:

1. DATE OF SURVEY: 12/14/2023
2. ACREAGE PARCEL: 9.82 ACRES
3. ASSESSOR'S PARCEL NUMBER(S): XXX-XX-XXX
4. PROPOSED LEASE AREA: 0.07 ± AC ± / 1,900 ± SQUARE FEET
5. PROPERTY OWNER(S):
6. MAGNETIC DECLINATION: XX 30'
7. CONVERGENCE ANGLE: -XX°XX'XX"

FIRM CLASSIFICATION

THE PROPERTY SHOWN HEREON FALLS WITHIN ZONE "X" AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 06075C0035H, EFFECTIVE DATE MARCH 21, 2021, AS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM.

(ZONE "X" BEING CLASSIFIED AS AREAS OF MINIMAL FLOOD HAZARD PER SAID F.I.R.M. MAP AREA=0)

PROPOSED ANTENNA GEODETIC COORDINATES

THE CENTER OF THE PROPOSED ANTENNAS AS SHOWN HEREON IS LOCATED AT THE FOLLOWING COORDINATES (NAD 83):

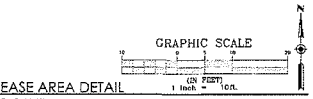
LATITUDE: N XX°XX'XX.XX"
LONGITUDE: W XXX°XX'XX.XX"

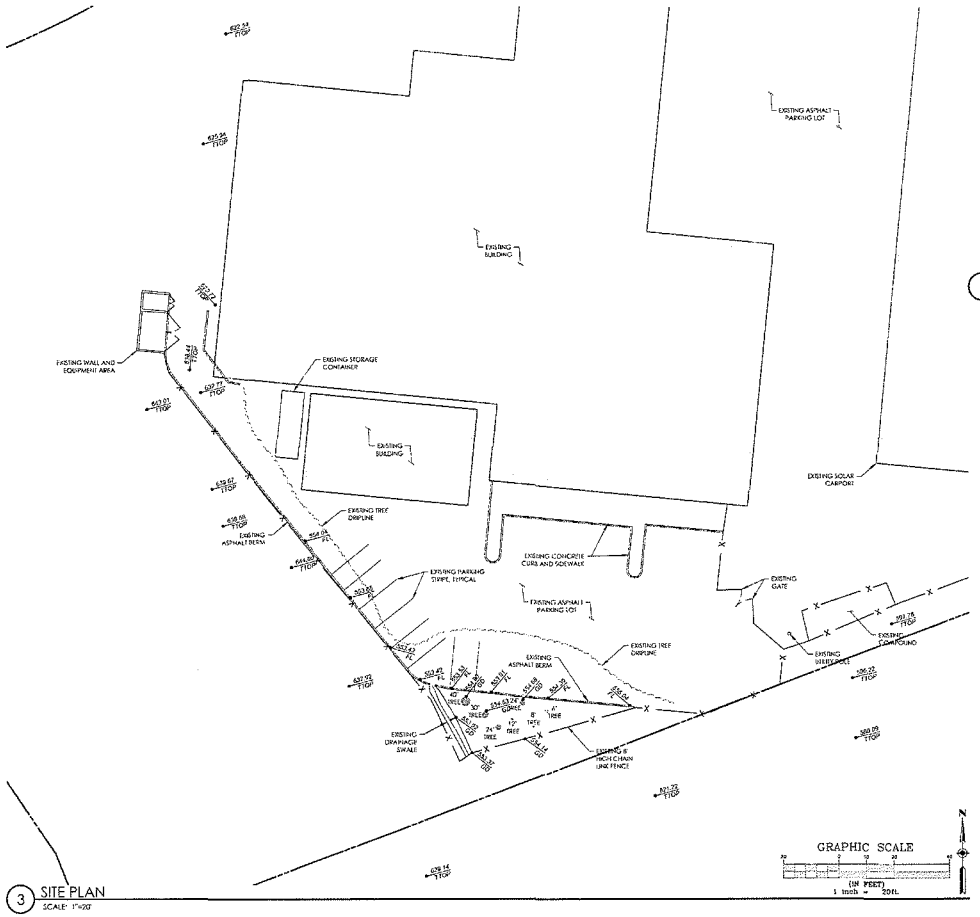
THE LATITUDE AND LONGITUDE SHOWN HEREON WERE MEASURED FROM DATA COLLECTED USING A TRIMBLE R10-2 GNSS DUAL FREQUENCY RECEIVER AND PROCESSED THROUGH THE NATIONAL GEODETIC SURVEY ONLINE POSITIONAL USER SERVICE. ACCURACY FOR SYNCHRONIC SURVEYING USING A TRIMBLE R10-2 GNSS RECEIVER IS HORIZONTALLY ±(10MM+1 PPM RMS).

LEGEND

AC	=	ASPHALTIC CONCRETE
EP	=	EDGE OF PAVEMENT
FL	=	FLOWLINE
FS	=	FINISHED SURFACE
GND	=	GROUND ELEVATION
TC	=	TOP OF CURB
AGL	=	ABOVE GRADE LEVEL
AMSL	=	ABOVE MEAN SEA LEVEL
TPOP	=	TREE TOP ELEVATION

2 LEASE AREA DETAIL
SCALE: 1"=10'





3 SITE PLAN
SCALE: 1"=20'

1 BOUNDARY & LEGAL DESCRIPTIONS
SCALE: NONE



4 BOUNDARY PLAN
SCALE: 1"=60'

at&t
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

PROJECT INFORMATION:

CCL05350

350 AMBER DR
SAN FRANCISCO, CA

CURRENT ISSUE DATE:

01/05/2024

ISSUED FOR:

90% SURVEY

REV.:	DATE:	DESCRIPTION:	BY:

COORDINATING ARCHITECT:

ODI OMNI DESIGN INCORPORATED
ARCHITECTURE | PLANNING | INTERIORS

SEAL:



CONSULTANT:

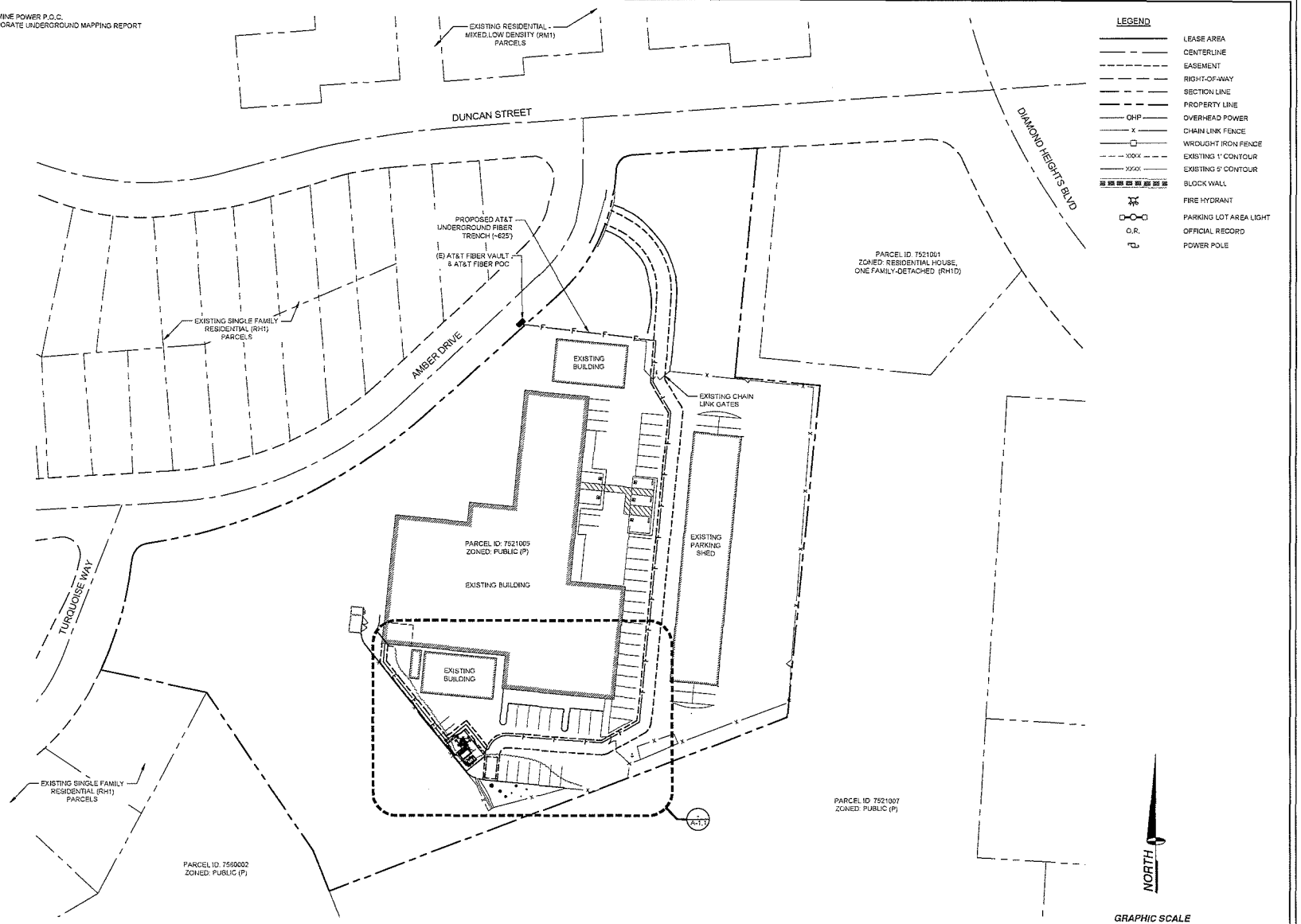
DRAWN BY:	CHK.:	APV.:
MWM	MWM	MWM

SHEET TITLE:

LEASE AREA DETAIL
SITE & BOUNDARY PLAN

SHEET NUMBER: C-1 REVISION: 1180-10XX

NOTE:
1. PG&E TO DETERMINE POWER P.O.C.
2. NEED TO INCORPORATE UNDERGROUND MAPPING REPORT



LEGEND

- LEASE AREA
- CENTERLINE
- EASEMENT
- RIGHT-OF-WAY
- SECTION LINE
- PROPERTY LINE
- OHP — OVERHEAD POWER
- CHAIN LINK FENCE
- WROUGHT IRON FENCE
- XXXX — EXISTING 1' CONTOUR
- XXXX — EXISTING 5' CONTOUR
- BLOCK WALL
- FIRE HYDRANT
- PARKING LOT AREA LIGHT
- O.R. — OFFICIAL RECORD
- POWER POLE

OVERALL SITE PLAN

11" X 17" SCALE	24" X 36" SCALE
1" = 80'	1" = 40'

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5001 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:

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A Nextedge Company
SPECTRUM SERVICES, LLC
4850 WEST OQUENDO ROAD
LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
FAX: (702) 367-8733

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	02/06/24	100% ZONING	R.C.

LICENSURE:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

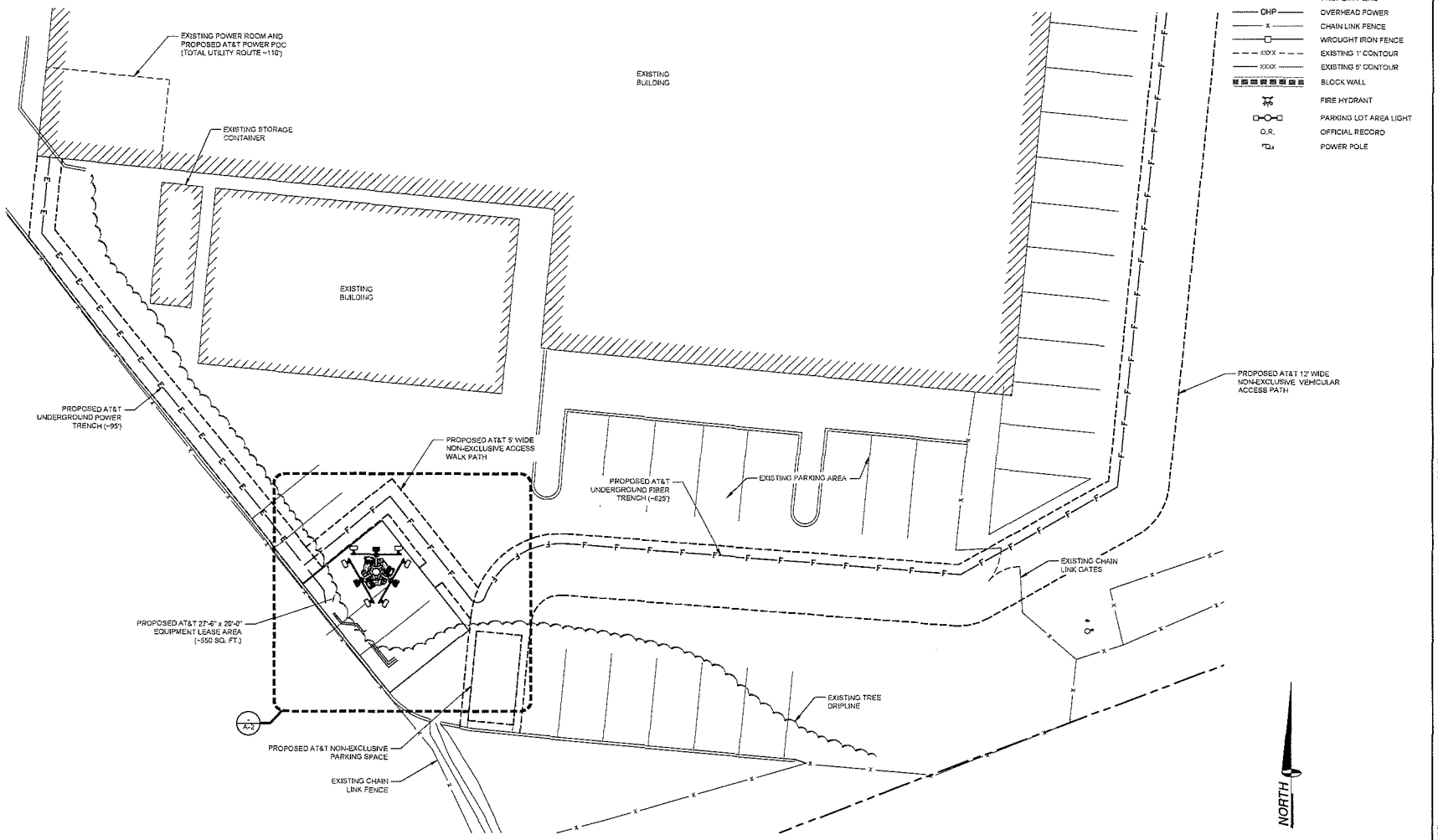
SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER

A-1

NOTE:
1. PG&E TO DETERMINE POWER P.O.C.
2. NEED TO INCORPORATE UNDERGROUND MAPPING REPORT



LEGEND

- LEASE AREA
- CENTERLINE
- EASEMENT
- RIGHT-OF-WAY
- SECTION LINE
- PROPERTY LINE
- OHP — OVERHEAD POWER
- CHAIN LINK FENCE
- WROUGHT IRON FENCE
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- BLOCK WALL
- FIRE HYDRANT
- PARKING LOT AREA LIGHT
- O.R. — OFFICIAL RECORD
- POWER POLE

ENLARGED SITE PLAN

11" X 17" SCALE	24" X 36" SCALE
1" = 20'	1" = 10'

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5001 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:

SPECTRUM
A Nextedge Company
SPECTRUM SERVICES, LLC
4850 WEST OQUENDO ROAD
LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
FAX: (702) 367-8733

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	02/05/24	100% ZONING	R.C.

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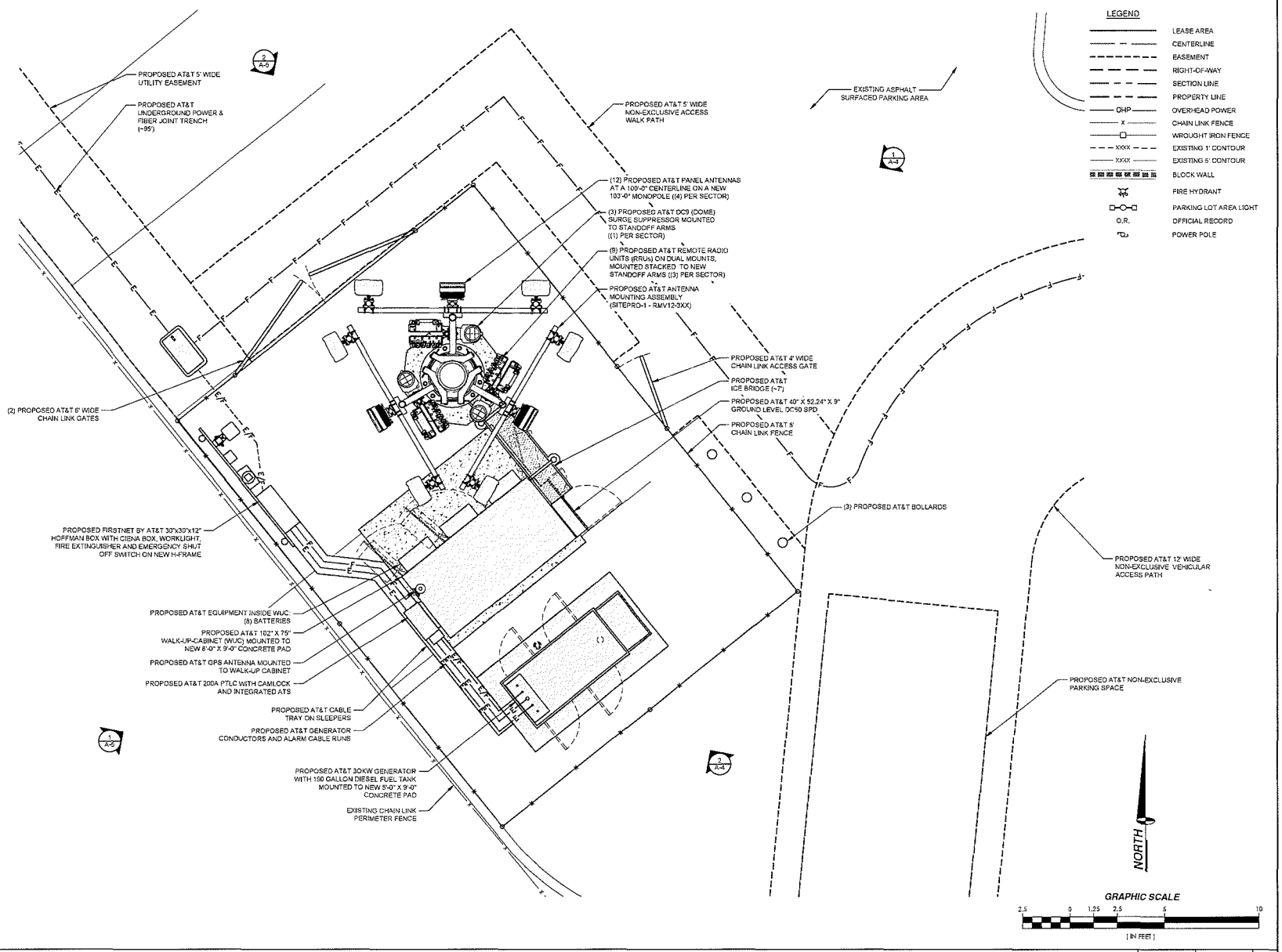
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET TITLE:

ENLARGED SITE PLAN

SHEET NUMBER

A-1.1



SITE DETAIL

11" X 17" SCALE	24" X 36" SCALE
1" = 5'	1" = 2'-6"

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

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AT&T SITE NO:	CCL05350
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APPROVED BY:	C. WENER

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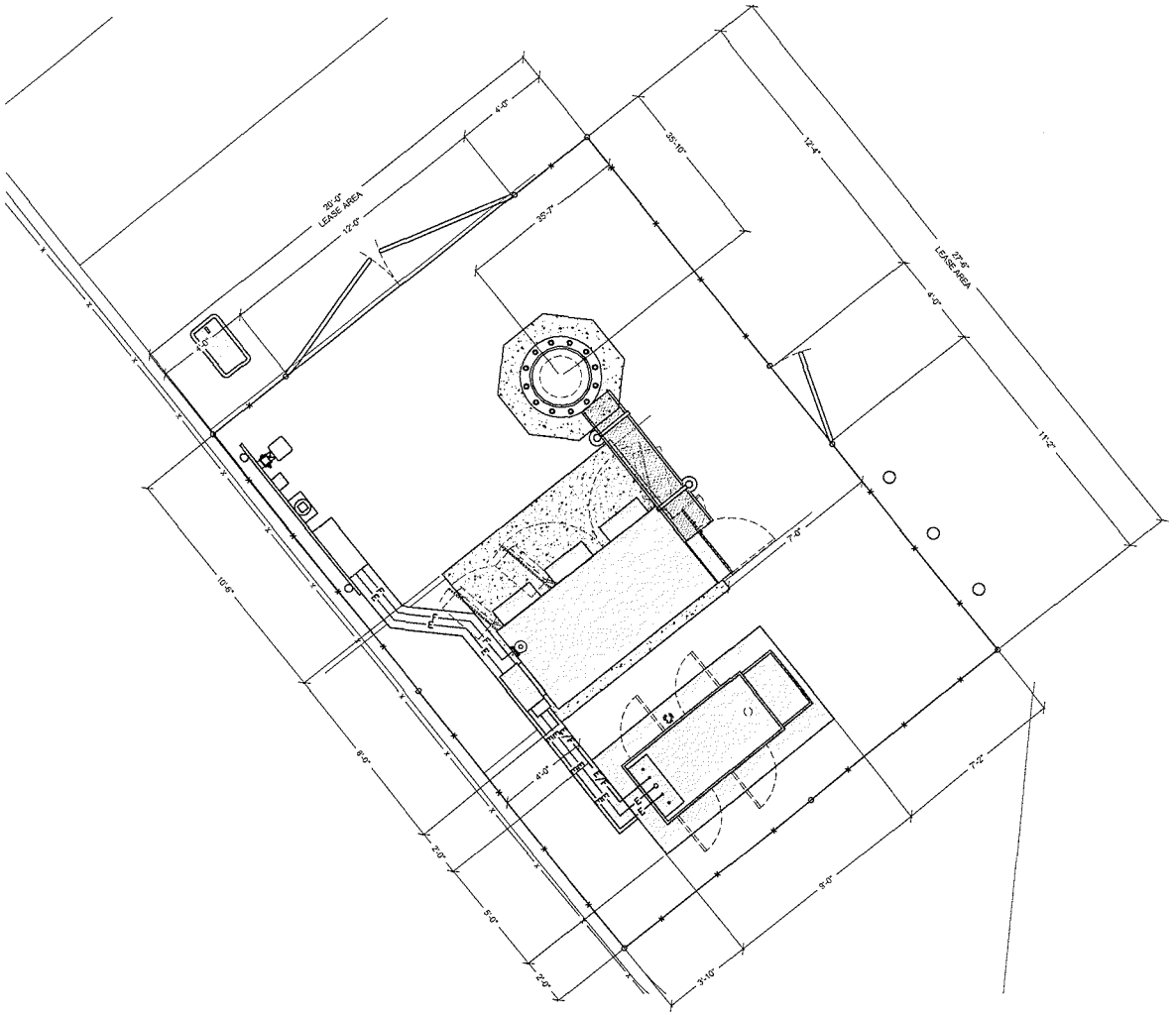
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET TITLE:

SITE DETAIL

SHEET NUMBER

A-2



LEGEND

- LEASE AREA
- CENTERLINE
- EASEMENT
- RIGHT-OF-WAY
- SECTION LINE
- PROPERTY LINE
- OHP — OVERHEAD POWER
- X — CHAIN LINK FENCE
- WROUGHT IRON FENCE
- XXXX — EXISTING 1' CONTOUR
- XXXX — EXISTING 5' CONTOUR
- BLOCK WALL
- FIRE HYDRANT
- PARKING LOT AREA LIGHT
- O.R. — OFFICIAL RECORD
- POWER POLE

NOTE:
PROPOSED ANTENNAS AND TOWER MOUNTED APPURTENANCES NOT SHOWN FOR CLARITY

NORTH

GRAPHIC SCALE

2.5 0 1.25 2.5 5 10

(IN FEET)

SITE DETAIL WITH DIMENSIONS

11" X 17" SCALE	24" X 36" SCALE	
1" = 5'	1" = 2'-6"	1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

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FAX: (702) 367-8733

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
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SHEET TITLE:

SITE DETAIL WITH DIMENSIONS

SHEET NUMBER

A-2.1

	POSITION	ANTENNA AZIMUTH	ANTENNA MAKE	ANTENNA MODEL	RRUs	EQUIPMENT CENTERLINE	CABLE TYPE	CABLE LENGTH
	ANTENNA AND EQUIPMENT SCHEDULE							
ALPHA SECTOR	1	0°	QUINTEL	QD668-2	(1) RADIO 4480 B5/B12A	100'-0"	(18) FIBER JUMPERS	135'
	2 (TOP)		ERICSSON	AIR6419 B77G (TOP)	INTEGRATED WITHIN AIR6419			
	2 (BOTTOM)		ERICSSON	AIR6419 B77D (BOTTOM)	INTEGRATED WITHIN AIR6449			
	3		QUINTEL	QD6612-2	(1) RADIO 4478 B14 (1) RADIO 4890 B25/B66			
BETA SECTOR	1	240°	QUINTEL	QD668-2	(1) RADIO 4480 B5/B12A	100'-0"	(18) FIBER JUMPERS	135'
	2 (TOP)		ERICSSON	AIR6419 B77G (TOP)	INTEGRATED WITHIN AIR6419			
	2 (BOTTOM)		ERICSSON	AIR6419 B77D (BOTTOM)	INTEGRATED WITHIN AIR6449			
	3		QUINTEL	QD6612-2	(1) RADIO 4478 B14 (1) RADIO 4890 B25/B66			
GAMMA SECTOR	1	120°	QUINTEL	QD668-2	(1) RADIO 4480 B5/B12A	100'-0"	(18) FIBER JUMPERS	135'
	2 (TOP)		ERICSSON	AIR6419 B77G (TOP)	INTEGRATED WITHIN AIR6419			
	2 (BOTTOM)		ERICSSON	AIR6419 B77D (BOTTOM)	INTEGRATED WITHIN AIR6449			
	3		QUINTEL	QD6612-2	(1) RADIO 4478 B14 (1) RADIO 4890 B25/B66			

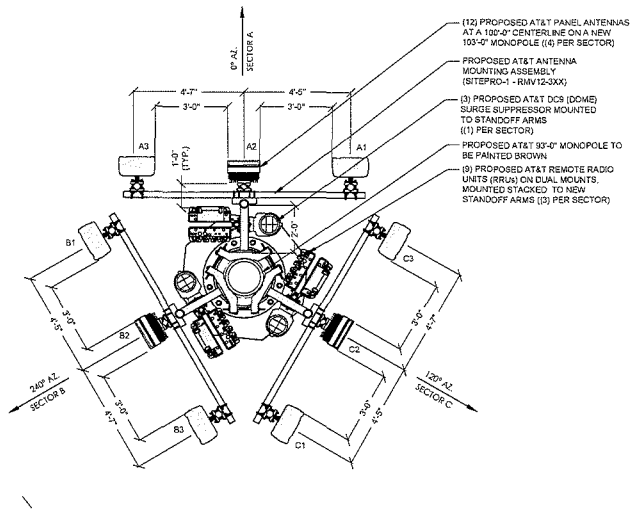
RFDS ID	RFDS-1702
RFDS DATE	01/26/2024
RFDS VERSION	1.00

NOTE:
1. ANTENNA POSITION ARE LEFT TO RIGHT FROM FRONT OF ANTENNA

ANTENNA & EQUIPMENT SCHEDULE

SCALE: NONE

2



NORTH

GRAPHIC SCALE

2.5 0 1.25 2.5 5 10

(IN FEET)

ANTENNA LAYOUT

11" X 17" SCALE	24" X 36" SCALE
1" = 5'	1" = 2'-0"

1

PROJECT INFORMATION:

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AT&T SITE NO:	CCL05350
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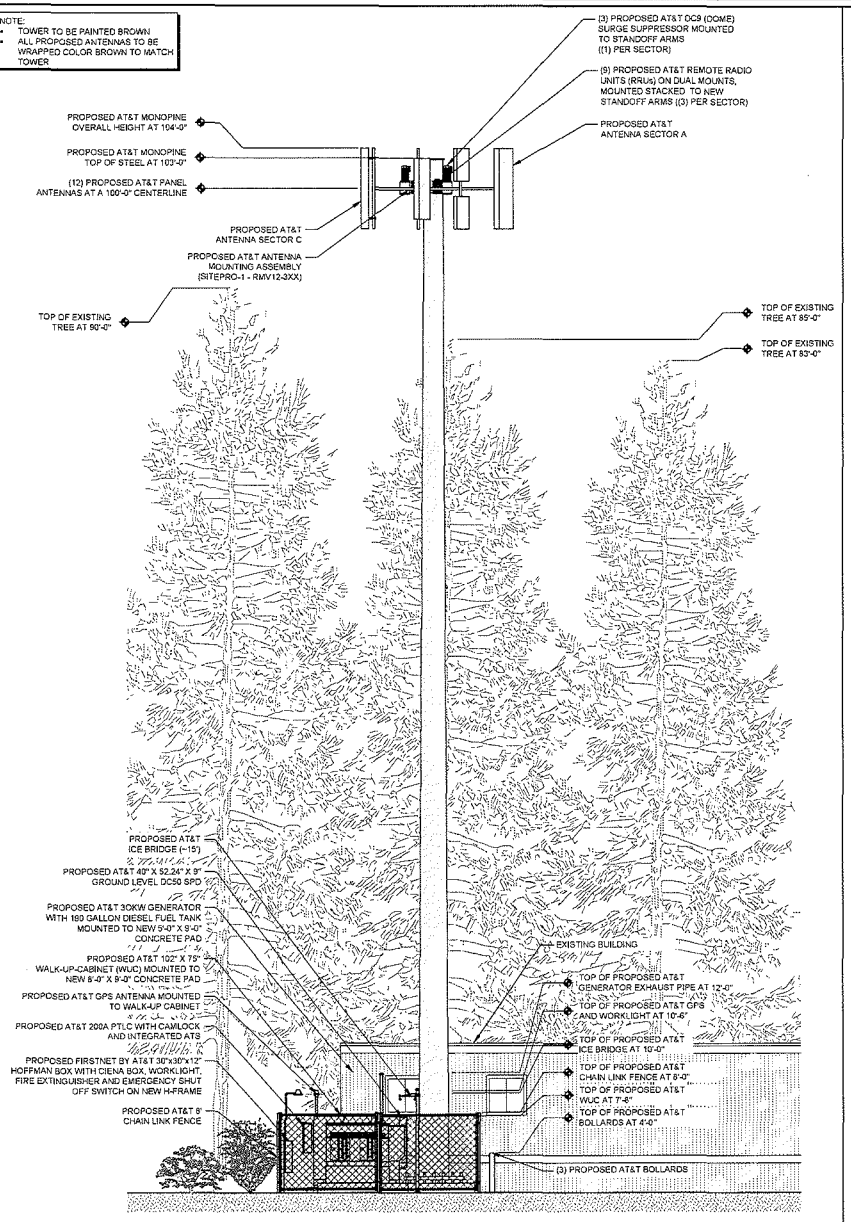
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SHEET TITLE:
ANTENNA LAYOUTS AND ANTENNA & EQUIPMENT SCHEDULE

SHEET NUMBER
A-3

NOTE:
- TOWER TO BE PAINTED BROWN
- ALL PROPOSED ANTENNAS TO BE WRAPPED COLOR BROWN TO MATCH TOWER

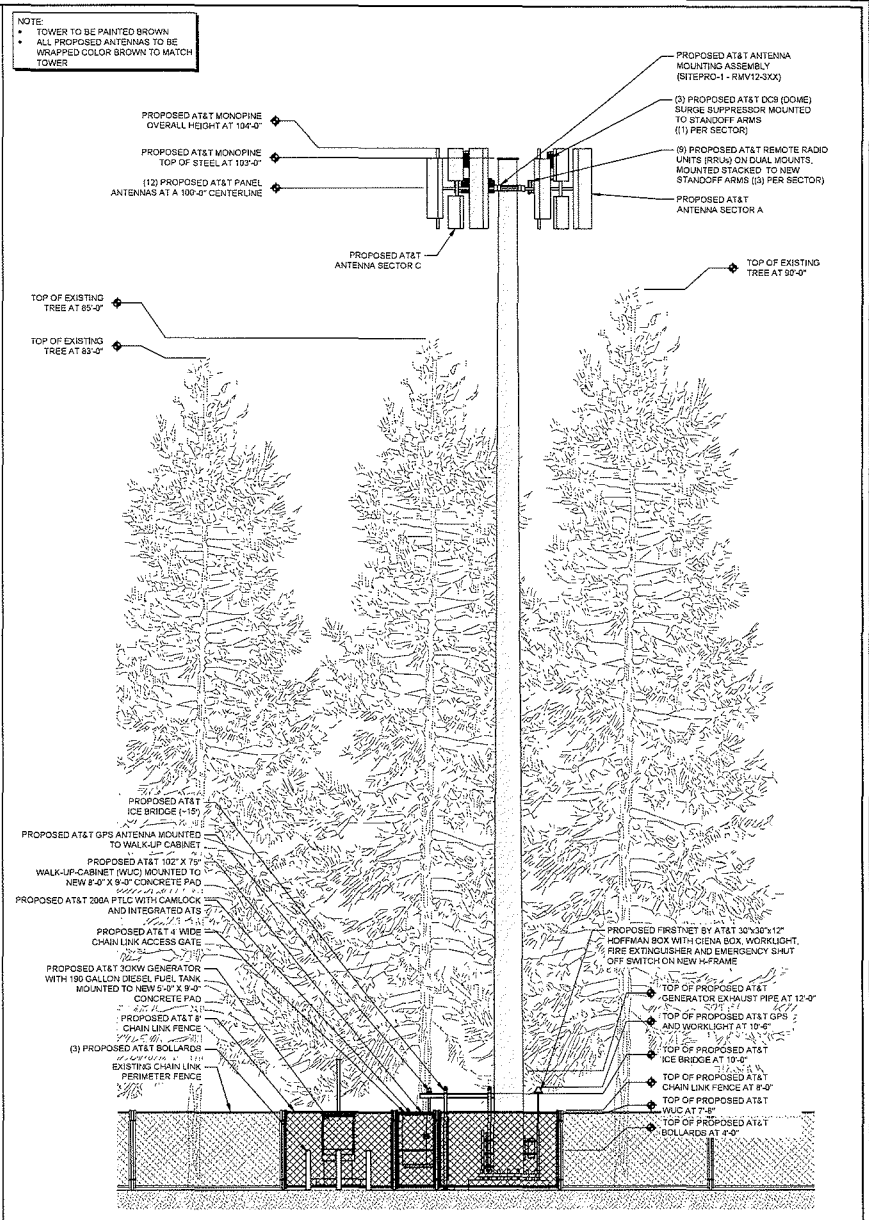


SOUTHEAST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 12'	1" = 6'

2

NOTE:
- TOWER TO BE PAINTED BROWN
- ALL PROPOSED ANTENNAS TO BE WRAPPED COLOR BROWN TO MATCH TOWER



NORTHEAST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 12'	1" = 6'

1

PROJECT INFORMATION:

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SF POLICE ACADEMY

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AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

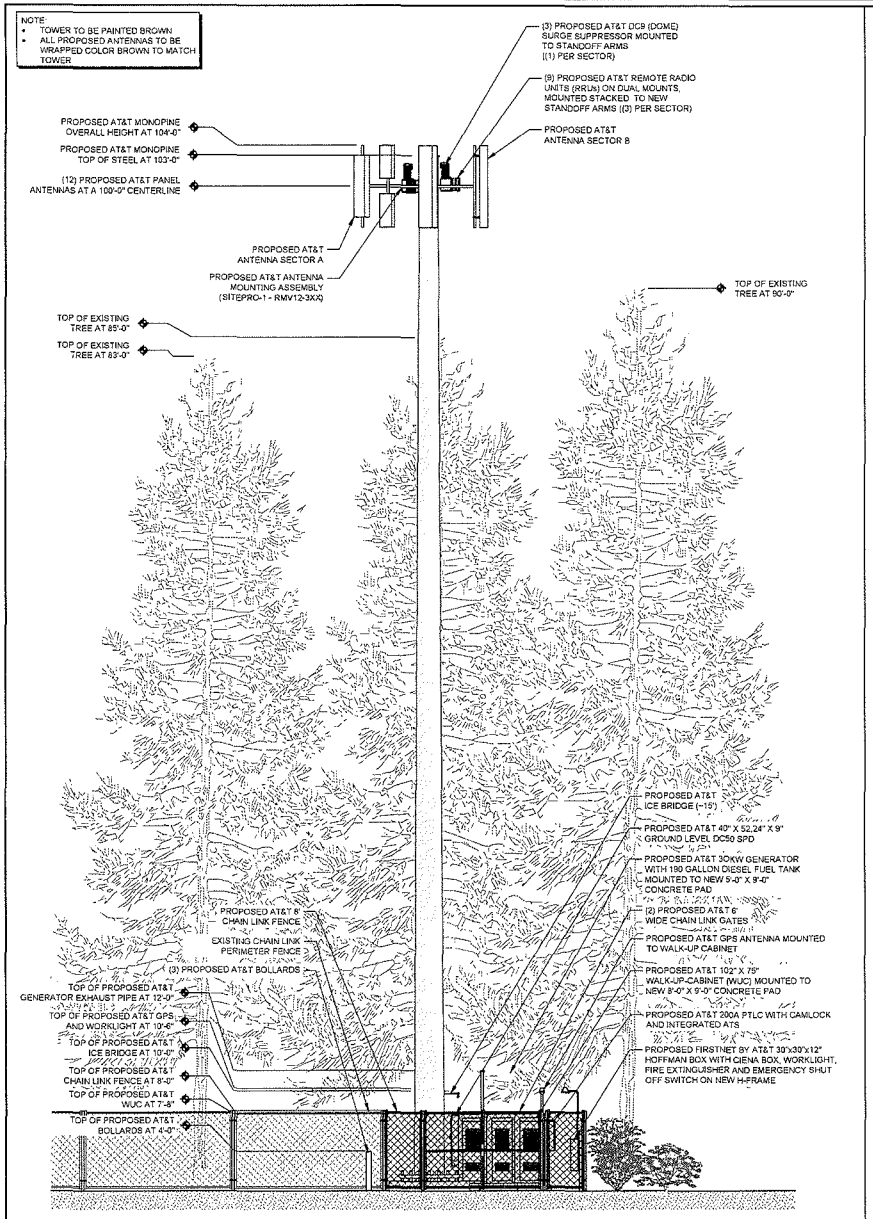
REV.	DATE	DESCRIPTION	BY
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SHEET TITLE:
NORTHEAST AND SOUTHEAST ELEVATIONS

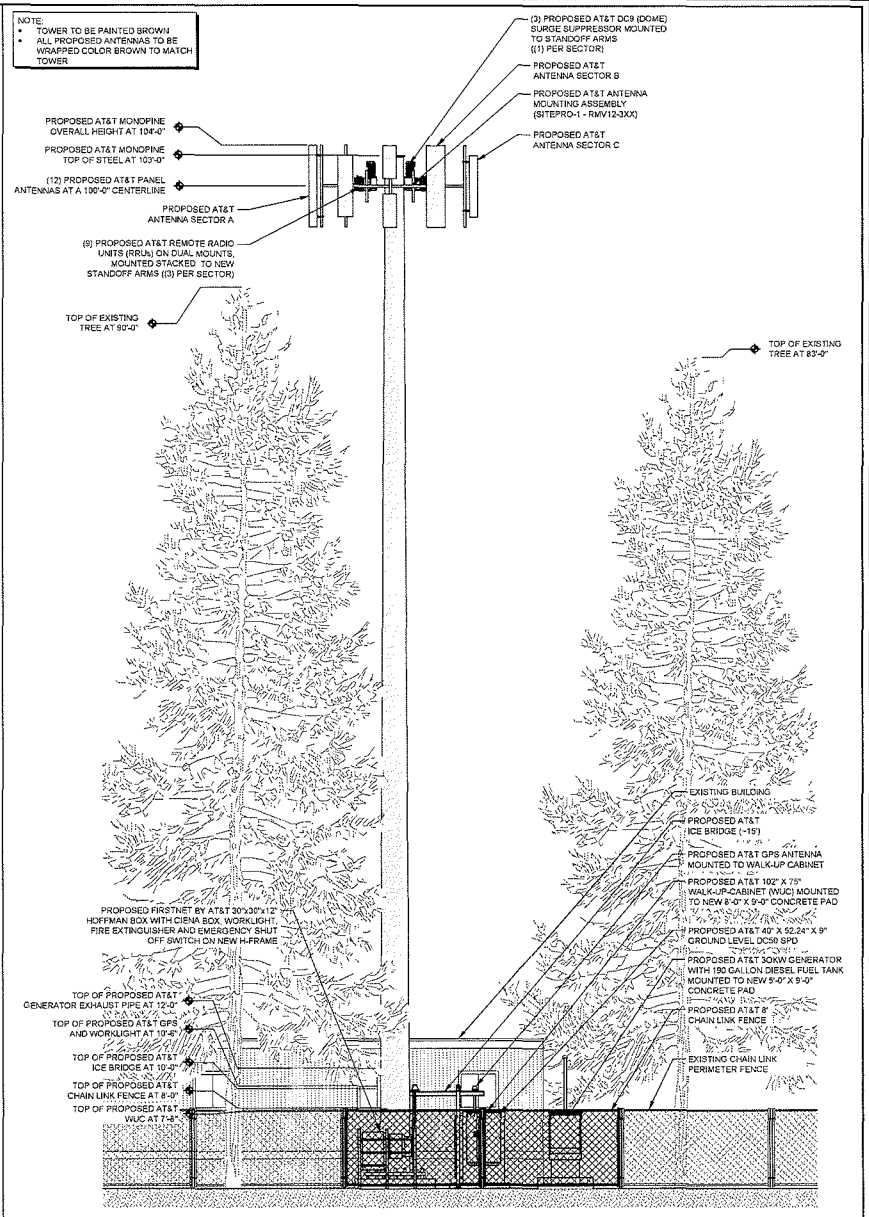
SHEET NUMBER
A-4



NORTHWEST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 10'	1" = 5'

2



SOUTHWEST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 10'	1" = 5'

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

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4850 WEST OQUENDO ROAD
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PHONE: (702) 367-7705
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AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

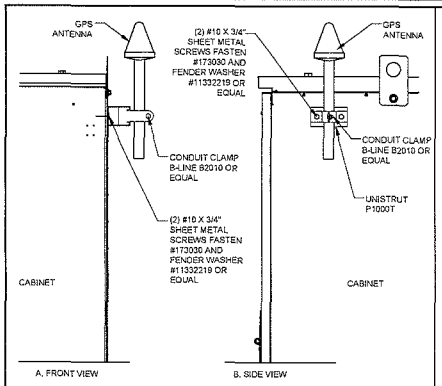
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0	02/08/24	100% ZONING	R.C.

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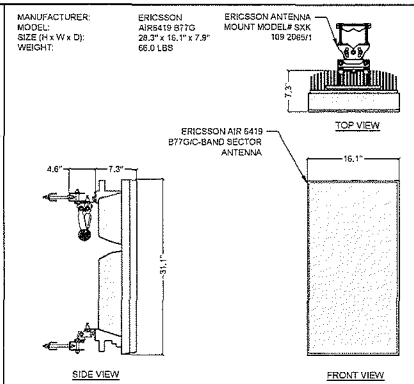
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SHEET TITLE:
SOUTHWEST AND NORTHWEST ELEVATIONS

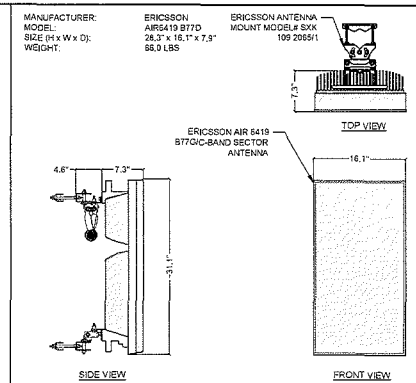
SHEET NUMBER
A-5



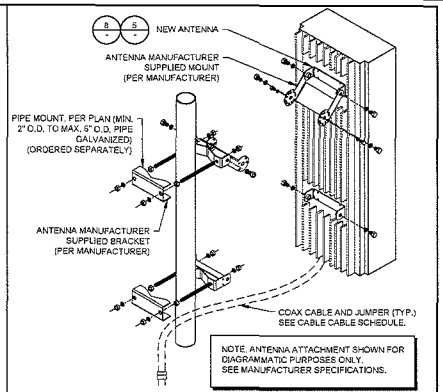
GPS ATTACHMENT | SCALE: NONE | 11



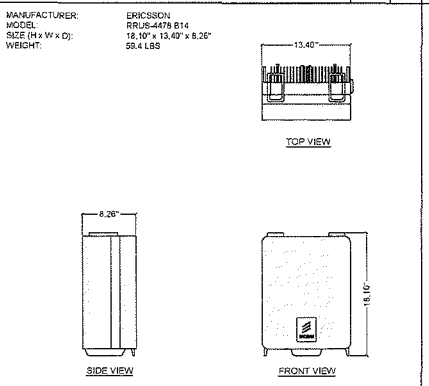
PANEL ANTENNA | SCALE: NONE | 8



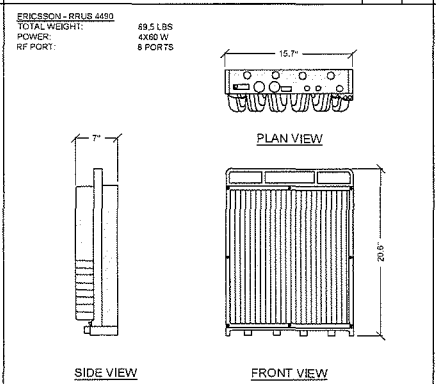
PANEL ANTENNA | SCALE: NONE | 5



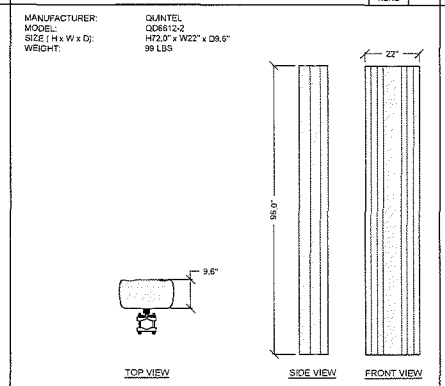
ANTENNA ATTACHMENT | SCALE: NONE | 2



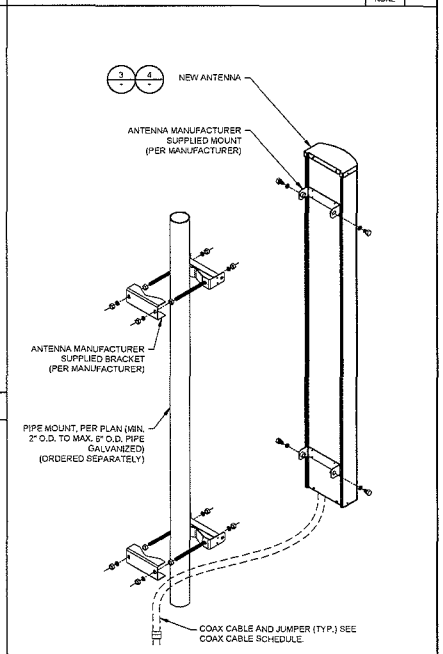
REMOTE RADIO HEAD (RRH) | SCALE: NONE | 10

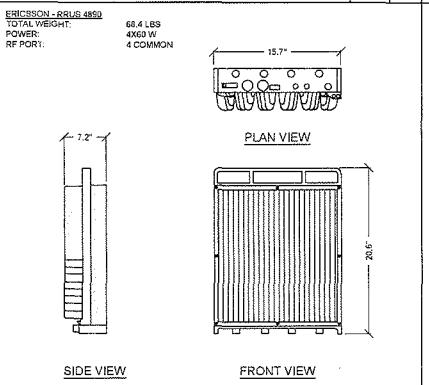


REMOTE RADIO HEAD (RRH) | SCALE: NONE | 7

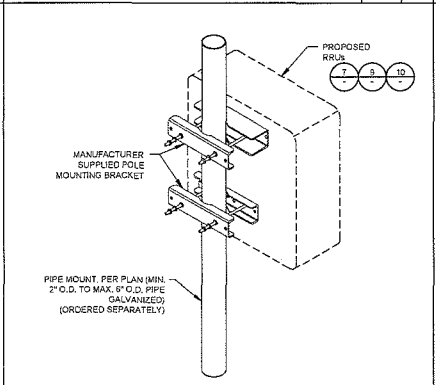


PANEL ANTENNA | SCALE: NONE | 4

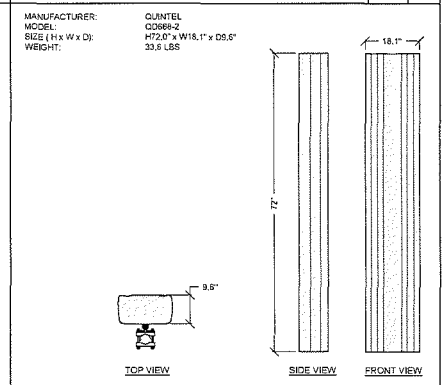




REMOTE RADIO UNIT (RRU) | SCALE: NONE | 9



RRU ATTACHMENT | SCALE: NONE | 6



PANEL ANTENNA | SCALE: NONE | 3

ANTENNA ATTACHMENT | SCALE: NONE | 1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
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AT&T SITE NO:	CCL05350
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APPROVED BY:	C. WENER

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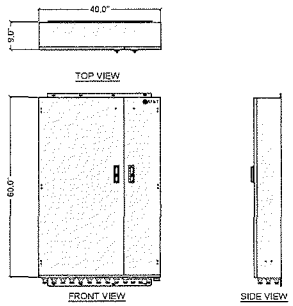
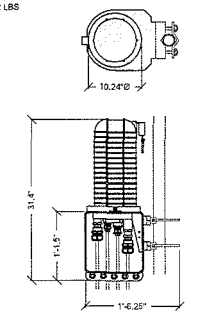
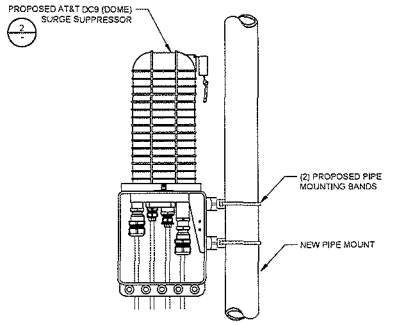
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SHEET TITLE:

EQUIPMENT DETAILS

SHEET NUMBER

D-1

		MANUFACTURER: RAYCAP MODEL: DC50-48-60-RS-50F SIZE (H x W x D): 60.0" x 40.0" x 9.0" WEIGHT: — LBS 
NOT USED SCALE: NONE 12	NOT USED SCALE: NONE 9	NOT USED SCALE: NONE 6	DC50 SURGE SUPPRESSOR SCALE: NONE 3
		SPECIFICATIONS MFG: RAYCAP MODEL: DC9-48-60-24-8C-EV SURGE PROTECTION SOLUTIONS DIMENSIONS L18.28" X W10.24" X H31.4 WEIGHT: 26.2 LBS 
NOT USED SCALE: NONE 11	NOT USED SCALE: NONE 8	NOT USED SCALE: NONE 5	SURGE SUPPRESSION (SQUID) SCALE: NONE 2
		
NOT USED SCALE: NONE 10	NOT USED SCALE: NONE 7	NOT USED SCALE: NONE 4	SURGE SUPPRESSOR ATTACHMENT SCALE: NONE 1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
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PREPARED FOR

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4850 W EST. DOUENDO ROAD
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PHONE: (702) 367-7705
FAX: (702) 367-8733

AT&T SITE NO: CCL05350

PROJECT NO: _____

DRAWN BY: R. CRUZ

CHECKED BY: R. MARTINEZ

APPROVED BY: C. WENER

ISSUE STATUS

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0	02/05/24	100% ZONING	R.C.

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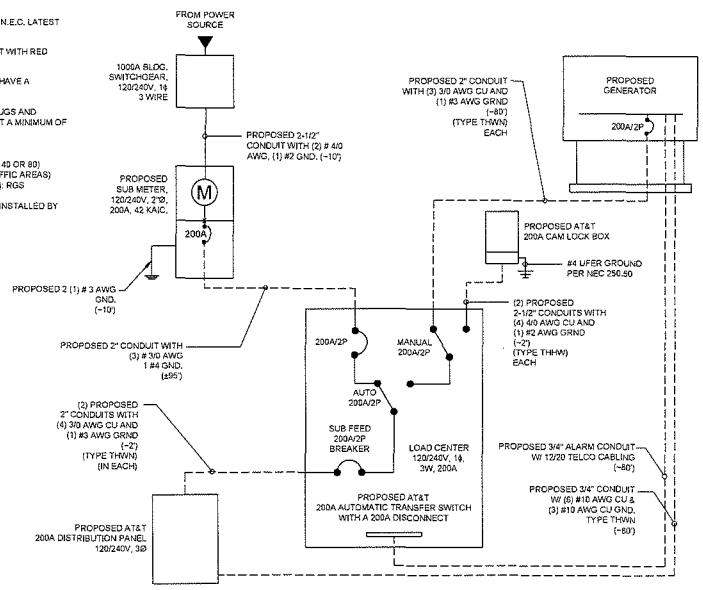
SHEET TITLE:

EQUIPMENT DETAILS

SHEET NUMBER

D-2

NOTES:
1. ALL WORK TO CONFORM TO N.E.C. LATEST STATE ADOPTED EDITION.
2. LABEL SERVICE DISCONNECT WITH RED TAG
3. ALL GFCI RECEPTACLES TO HAVE A DEDICATED GROUND WIRE.
4. EQUIPMENT TERMINATION LUGS AND CONDUCTORS ARE RATED AT A MINIMUM OF 75°C.
5. CONDUIT REQUIREMENTS
-UNDERGROUND PVC (SCH 40 OR 80)
-INDOOR: EMT (RGS IN TRAFFIC AREAS)
-OUTDOOR (ABOVE GRADE): RGS
6. LIGHTING IS DESIGNED AND INSTALLED BY SHELTER MANUFACTURER



SINGLE LINE DIAGRAM

SCALE: NONE | 4

1. UTILITY POINTS OF SERVICE AND WORK/MATERIALS SHOWN ARE BASED UPON PRELIMINARY INFORMATION PROVIDED BY THE UTILITY COMPANIES AND ARE FOR BID PURPOSES ONLY.
2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY COMPANY ENGINEERING PLANS AND SPECIFICATIONS ONLY. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULL ROPES, CABLES, PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT (IF REQUIRED), TRANSFORMER PAD, BARRIERS, POLE RISERS, TRENCHING, BACK FILL, PAY ALL UTILITY COMPANY FEES AND INCLUDE ALL REQUIREMENTS IN SCOPE OF WORK.

ELECTRICAL CERTIFICATES

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATINGS INDICATED FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED VOLTAGE DROP CALCULATIONS AND ALL BRANCH CIRCUITS AND FEEDERS COMPLY WITH NEC (LISTED ON T1) ARTICLE 210.19(A)(1) FPN NO. 4.

ELECTRICAL NOTES

SCALE: NONE | 3

PANEL NAME:	X	BUS:	225	P VOLTAGE:	120/240, 1Ø, 3W	MOUNTING:	PEDESTAL
LOCATION:	R.O.W.	MAIN C.B.:	200	AIC RATING:	42,000	TYPE:	MAIN/SUB

CIRCUIT TYPE: N = NON-CONTINUOUS C = CONTINUOUS

CKT #	TY	TRP	POL	DESCRIPTION	ØA	ØB	ØA	ØB	DESCRIPTION	TRP	POL	TY	CIR #
1	N	30		SPARE	-		560		LIGHT & RECEPACLE	20	1	N	2
3	N		2			-		360	BATTERY CHARGER	20	1	N	4
5	N	25		HVAC	1,400		480		BATTERY HEATER	20	1	N	6
7	N		2			1,400		2,150	RECTIFIER # 11 & 12	30		N	8
9	N	20	1	GFCI	180		2,150				2	N	10
11	N	30		RECTIFIER # 1 & 2		2,150		2,150	RECTIFIER # 13 & 14	30		N	12
13	N		2		2,150		2,150				2	N	14
15	N	30		RECTIFIER # 3 & 4		2,150		2,150	RECTIFIER # 15 & 16	30		N	16
17	N		2		2,150		2,150				2	N	18
19	N	30		RECTIFIER # 5 & 6		2,150		-				N	20
21	N		2		2,150		-					N	22
23	N	30		RECTIFIER # 7 & 8		2,150		-				N	24
25	N		2		2,150		-					N	26
27	N	30		RECTIFIER # 9 & 10		2,150		-				N	28
29	N		2		2,150		-					N	30

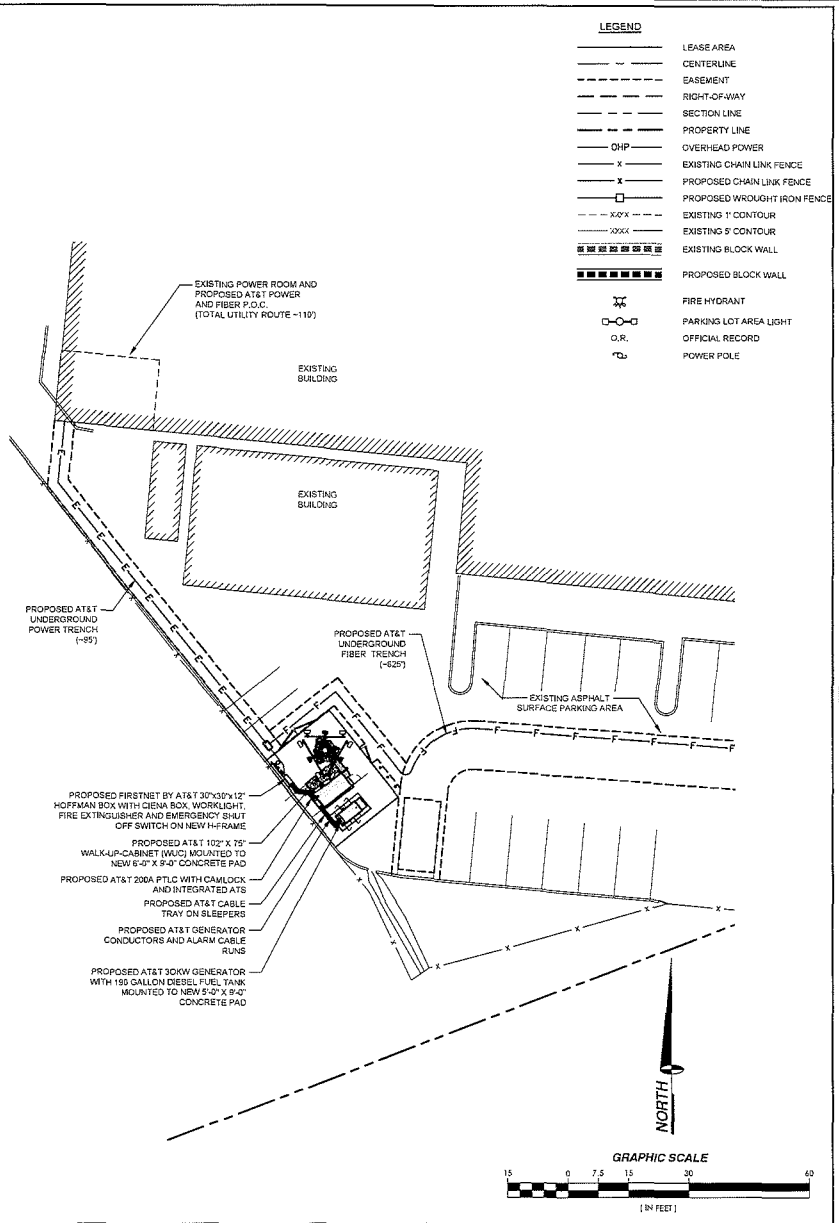
NOTES:

PHASE TOTALS	ØA =	19,820	ØB =	18,960

TOTAL CONNECTED VA:	38,780.00
PANEL DEMAND KVA	38.78
PANEL DEMAND AMPS:	161.58
RGEST Ø DEMAND AMPS:	165.17

PANEL SCHEDULE

SCALE: NONE | 2



UTILITY ROUTING

11" X 17" SCALE	24" X 36" SCALE
1" = 30'	1" = 15'

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5001 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:

SPECTRUM
A Mastedge Company
SPECTRUM SERVICES, LLC
6850 WEST COUENTO ROAD
LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
FAX: (702) 367-8733

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	02/06/24	100% ZONING	R.C.

LICENSURE:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET TITLE:
UTILITY ROUTING, PANEL SCHEDULE, 1-LINE DIAGRAM & NOTES

SHEET NUMBER
E-1

San Francisco Planning

BOARD OF SUPERVISORS APPEAL FEE WAIVER
FOR NEIGHBORHOOD ORGANIZATIONS

APPLICATION

Appellant's Information

Name: DANIEL SCHERECK

Address: DIAMOND HEIGHTS COMMUNITY ASSOCIATION
PO BOX 31529, SF CA 94131

Email Address: dhcasf@gmail.com

Telephone: 831-277-9930

- Personal: 5160 DIAMOND HEIGHTS BLVD #C102 SF CA 94131

Neighborhood Group Organization Information

Name of Organization: DIAMOND HEIGHTS COMMUNITY ASSOCIATION

Address: PO Box 31529, SF CA 94131

Email Address: dhcasf@gmail.com

Telephone: 831-277-9930

Property Information

Project Address: 350 AMBER DRIVE

Project Application (PRJ) Record No: 2024-004318CUA Building Permit No:

Date of Decision (if any): SEPTEMBER 25, 2025

Required Criteria for Granting Waiver

All must be satisfied; please attach supporting materials.

REQUIRED CRITERIA	YES	NO
The appellant is a member of the stated neighborhood organization and is authorized to file the appeal on behalf of the organization. Authorization may take the form of a letter signed by the President or other officer of the organization.	✓	
The appellant is appealing on behalf of an organization that is registered with the Planning Department and that appears on the Department's current list of neighborhood organizations.	✓	
The appellant is appealing on behalf of an organization that has been in existence at least 24 months prior to the submittal of the fee waiver request. Existence may be established by evidence including that relating to the organization's activities at that time such as meeting minutes, resolutions, publications and rosters.	✓	
The appellant is appealing on behalf of a neighborhood organization that is affected by the project and that is the subject of the appeal.	✓	

For Department Use Only

Application received by Planning Department:

By: _____ Date: _____

Submission Checklist:

☐ APPELLANT AUTHORIZATION ☐ CURRENT ORGANIZATION REGISTRATION ☐ MINIMUM ORGANIZATION AGE

☐ PROJECT IMPACT ON ORGANIZATION

☐ WAIVER APPROVED ☐ WAIVER DENIED

DIAMOND HEIGHTS COMMUNITY ASSOCIATION

PO Box 31529
San Francisco, CA 94131
831-277-9930
dhcasf@gmail.com

President
Daniel Schereck

Vice President
Dennise Gearty

Board of Directors
Betsy Eddy
Pooja Sabharwal
Cliff Detz
Betty Peskin
Lee Ann Prifti
Bob Pullum

October 26, 2025

Impact Statement

This project will impact members of the Diamond Heights Community Association and other residents based on concerns around safety and aesthetics.

See appeal case address 350 Amber Drive and Case Number 2024-004318CUA.

Sincerely yours,

Daniel Schereck

Diamond Heights Community Association
Board of Directors Minutes, February 12, 2025, 7:00pm Updated 2-15-25

Minutes
Present: Betty, Betsy, Cliff, Daniel, Dennise, Lee Ann, Pooja
Absent: Bob

- **Call to Order on Zoom**
- **Agenda Review**
- **Treasurer's Report:** The DHCA SF Credit Union account has $936.90 in it and in saving $99.50.
- **Minutes:** Any changes for January 8, 2025, minutes? Betsy corrected a few items. Updated minutes will be emailed to everyone.

New Business:

- **Congratulation to Dennise Gearty, our new Board Member!** Betsy congratulated Dennise and said Dennise would be an asset to the Board and to the community.
- **Discussion of Board Reorganization:** After a long discussion on process and timing, Daniel Schereck was voted in as president of the Board and Dennise Gearty as vice-president. The vote for each was unanimous. Pooja who has served as the vice president agreed to step down and remain on the board to continue to help with organization and as needed. Betsy said she would like to remain on the Board to help with the transition and resource information.
  Some background info on Daniel: Daniel moved to Diamond Heights in Spring 2023 after living elsewhere in the city. Daniel is a renter. He recently left Apple after 13 years. Daniel is committed to serving the neighborhood. He wants people to be proud of Diamond Heights. Daniel will be traveling from March 3 back May 16 but will attend to business and attend meetings virtually.
- **Muni Concern – MTA may reduce the 35 and 52 from 30 minutes to 45 minutes between buses:** Dennise contacted Sean Kennedy, MTA, and invited him or other staff to attend a community meeting to explain why service may be reduced and to hear the ramifications from attendees. Dennise provided a list of questions including how the ridership was tabulated.
- **Memorial for Bob Dockendorff:** Lee Ann said she would try to find out if there will be a memorial service in San Francisco.
- **Lee Ann was voted in as 2nd vice president of Coalition of San Francisco Neighborhoods.**

- **Old Business**
- **DHCA Priority List Updates:** Betsy said she restructured the list and move some items to the list of accomplishment
- **DHCA Accomplishments 2024 Review.** Betsy drafted the accomplishments with input from the Board and will email the draft to the Board.
- **RVs and Caravans on the 5100 block of Diamond Heights Blvd.:** No time for an update
- **Community wide DHCA meeting:** Dennise has contacted Mayor Lurie's office. A staff member emailed that the request was received, and a date will be worked on.
- **DHCA Boundaries Map:** No new map yet.
- **Facebook Community page for the DHCA:** No update.
- **New Logo Discussion:** Dennise will follow up with Bob on the preferred designs.

- **Slide Presentation of Lighting and Plaque request for Gateway Sculpture Update:** No update.
- **Next Board Meeting:** Wednesday March 12 at 7 pm on Zoom?

Adjournment

Other: Items to follow up when something new occurs:
- Dip at Elk/Diamond Heights Blvd. at Sussex: Betsy
- DH Photo History Project: Bob is exploring avenues for funding.
- George Christopher Park Renaming: No action. Will monitor the issue.
- Delphine on Diamond Planning Dept. Hearing for New Units

Respectively submitted

Betsy Eddy

BUSINESS REGISTRATION CERTIFICATE

FY 2023-24

RENEW BY DATE	EXPIRATION DATE
05-31-2024	06-30-2024

BUSINESS ACCOUNT NUMBER	LOCATION ID
1069637	1145068-05-171
TRADE NAME (DBA)	BUSINESS LOCATION
DIAMOND HEIGHTS COMMUNITY ASSO	**14 FAMUM ST**
BUSINESS	THIRD PARTY TAX COLLECTOR
DIAMOND HEIGHTS COMMUNITY ASSO	☐ PARKING TAX ☐ TRANSIENT OCCUPANCY TAX

DIAMOND HEIGHTS COMMUNITY ASS
PO BOX 31529
SAN FRANCISCO CA 94131

CITY AND COUNTY OF SAN FRANCISCO
OFFICE OF THE TREASURER & TAX COLLECTOR

José Cisneros
Treasurer

David Augustine
Tax Collector

POST CLEARLY VISIBLE AT THIS BUSINESS LOCATION

Read reverse side. To update addresses or to close a business, go to https://sftreasurer.org/business-account-update.

BUSINESS REGISTRATION CERTIFICATE

FY 2024-25

RENEW BY DATE	EXPIRATION DATE
05-31-2025	06-30-2025

BUSINESS ACCOUNT NUMBER	LOCATION ID
1069637	1145068-05-171
TRADE NAME (DBA)	BUSINESS LOCATION
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BUSINESS REGISTRATION CERTIFICATE

FY 2025-26

RENEW BY DATE	EXPIRATION DATE
03-02-2026	03-31-2026

BUSINESS ACCOUNT NUMBER	LOCATION ID
1069637	1145068-05-171
TRADE NAME (DBA)	BUSINESS LOCATION
DIAMOND HEIGHTS COMMUNITY ASSO	**14 FAMUM ST**
BUSINESS	THIRD PARTY TAX COLLECTOR
DIAMOND HEIGHTS COMMUNITY ASSO	☐ PARKING TAX ☐ TRANSIENT OCCUPANCY TAX

DIAMOND HEIGHTS COMMUNITY ASS
PO BOX 31529
SAN FRANCISCO CA 94131

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BUSINESS REGISTRATION CERTIFICATE

FY 2022-23

RENEW BY DATE	EXPIRATION DATE
05-31-2023	06-30-2023

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1069637	1145068-05-171
TRADE NAME (DBA)	**BUSINESS LOCATION**
DIAMOND HEIGHTS COMMUNITY ASSO	**14 FAMUM ST**
BUSINESS	THIRD PARTY TAX COLLECTOR
DIAMOND HEIGHTS COMMUNITY ASSO	☐ PARKING TAX ☐ TRANSIENT OCCUPANCY TAX

DIAMOND HEIGHTS COMMUNITY ASSO
PO BOX 31529
SAN FRANCISCO CA 94131

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DIAMOND HEIGHTS COMMUNITY ASSOCIATION

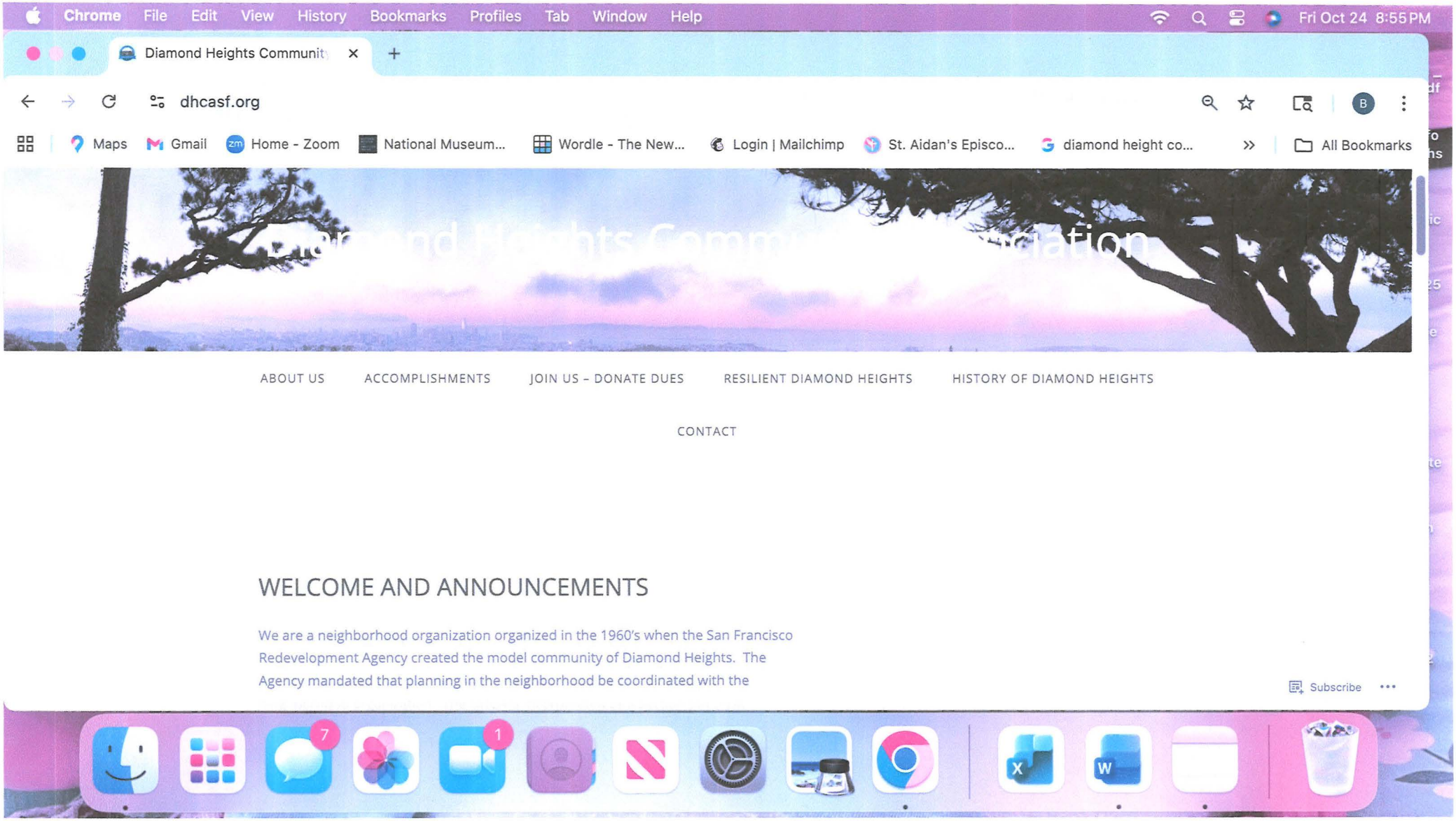
Diamond Heights Community Association (DHCA) Verification 10-24-25

Neighborhood organization that has been in existence for 24 months prior to the filing date of the request

Please see attachments for each of the following:

- Section of SF Planning Neighborhood Groups showing the DHCA listing
- The DHCA website, www.dhcasf.org, shows:
    - Announcements to our email list of 730 neighborhood stakeholders from present day to back to before Jeff Sheehy was a San Francisco Supervisor from January 2017 to July 2018. We will add dates to announcements in the future
    - Accomplishments tab on Welcome page shows DHCA accomplishments from 2015 through 2023. See screenshot of welcome page
- DHCA Board Minutes – Sept. 13, 2025
- Receipt from CA Secretary of State showing filing renewal as a nonprofit corporation dated 7-1-23
- Confirmation of FTB 199N e-Postcard filing dated 7-3-23
- DHCA file for a portion of 2023 emails from former president, Betsy Eddy

ORGANIZATION	NAME	ADDRESS	CITY	STATE	ZIP	EMAIL	NOTIFICATION PREFERENCES	NEIGHBORHOOD OF INTEREST
PHYSICAL NOTICES								
Martin Luther Tower		1001 Franklin Street, Apt. 10K	San Francisco	CA	94109	lamder@aol.com	Physical	Downtown/Civic Center
Sherwin Williams	Francesca Panullo	1415 Ocean Ave	San Francisco	CA	94112	sw8644@sherwin.com	Physical	Bayview, Bernal Heights, Crocker Amazon, Diamond Heights, Excelsior, Glen Park, Inner Sunset, Lakeshore, Noe Valley, Ocean View, Outer Mission, Outer Sunset, Parkside, Potrero Hill, South Bayshore, Twin Peaks, Visitacion Valley, West of Twin Peaks
West of Twin Peaks Central Council	Matt Chamberlain	P.O. Box 27112	San Francisco	CA	94127	info@WestOfTwinPeaks.org President@WestOfTwinPeaks.org	Physical	Diamond Heights, Lakeshore, Parkside, Twin Peaks, West of Twin Peaks
BOTH PHYSICAL & ELECTRONIC NOTICES								
Board of Supervisors	Rafael Mandelman	1 Dr. Carlton B Goodlett Place, Room #244	San Francisco	CA	94102-4689	Rafael.Mandelman@sfgov.org; Kyle.Smeallie@sfgov.org; Tom.Temprano@sfgov.org; jacob.bintliff@sfgov.org; mandelmanstaff@sfgov.org	Both	Castro/Upper Market, Diamond Heights, Glen Park, Noe Valley, Twin Peaks
ELECTRONIC NOTICES								
Diamond Heights Community Association	Daniel Schereck	P.O. Box 31529	San Francisco	CA	94131	dhcasf@gmail.com	Electronic	Diamond Heights, Glen Park, Noe Valley
Diamond Heights Homeowners Association (DHHOA)	Carey Rutigliano	108 Everson Street	San Francisco	CA	94131	careyruttig@yahoo.com	Electronic	Diamond Heights, Glen Park
San Francisco Land Use Coalition (SFLUC)	Gary Weiss	78 Mars Street	San Francisco	CA	94114	garysfx@gmail.com	Electronic	Castro/Upper Market, Diamond Heights, Glen Park, Haight Ashbury, Mission, Noe Valley, South of Market, Twin Peaks, Upper Market, Western Addition
Sherwood Forest Homeowners Association	Tom Hoshiyama / Hiliarie Connolly	111 Robinhood Drive	San Francisco	CA	94127	ConnollyHilarie@gmail.com	Electronic	Diamond Heights, Twin Peaks, West of Twin Peaks
Twin Peaks Eastside Neighborhood Alliance (TPENA)	Nancy O'Brien	74 Crestline Drive, #9	San Francisco	CA	94131	nancyob6@comcast.net	Electronic	Diamond Heights, Twin Peaks


Chrome File Edit View History Bookmarks Profiles Tab Window Help
Fri Oct 24 8:55 PM
Diamond Heights Communit
dhcasf.org
Maps
Gmail
Home - Zoom
National Museum...
Wordle - The New...
Login | Mailchimp
St. Aidan's Episco...
diamond height co...
All Bookmarks
ABOUT US
ACCOMPLISHMENTS
JOIN US – DONATE DUES
RESILIENT DIAMOND HEIGHTS
HISTORY OF DIAMOND HEIGHTS
CONTACT
WELCOME AND ANNOUNCEMENTS
We are a neighborhood organization organized in the 1960's when the San Francisco Redevelopment Agency created the model community of Diamond Heights. The Agency mandated that planning in the neighborhood be coordinated with the
Subscribe

Diamond Heights Community Association
Board of Directors Minutes, February 12, 2025, 7:00pm Updated 2-15-25

Minutes
Present: Betty, Betsy, Cliff, Daniel, Dennise, Lee Ann, Pooja
Absent: Bob

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- **New Logo Discussion:** Dennise will follow up with Bob on the preferred designs.

Secretary of State

Business Programs Division
1500 11th Street, Sacramento, CA 95814

Elizabeth Eddy
14 FARNUM STREET
SANFRANCISCO, CA 94131

Receipt Date: 07/01/2023
Receipt No.: 4601044

Receipt Detail

Description	Document/Payment No.	Amount
Nonprofit Corp - Statement of Information	BA20231051995	-$20.00
Payment - Web Credit Card	43**********8723 / Auth. No. 04295D	$20.00

Total Amount Charged: **-$20.00**
Total Payment Received: **$20.00**

199N e-Postcard

Confirmation

Privacy Policy

Print this page for your records. The Confirmation Number below is proof that you successfully filed your 199N e-Postcard.

We received your 199N e-Postcard on 7/3/2023 9:02:44 AM.

Confirmation Number: 081389818412

Entity ID:
0813898
Entity Name:
DIAMOND HEIGHTS COMMUNITY ASSOCIATION

Account Period Information

Account Period Beginning:
1/1/2022
Account Period Ending:
12/31/2022

This is not your entity's first year in business.

Your entity has not terminated or gone out of business.

Your entity has not changed the account period.

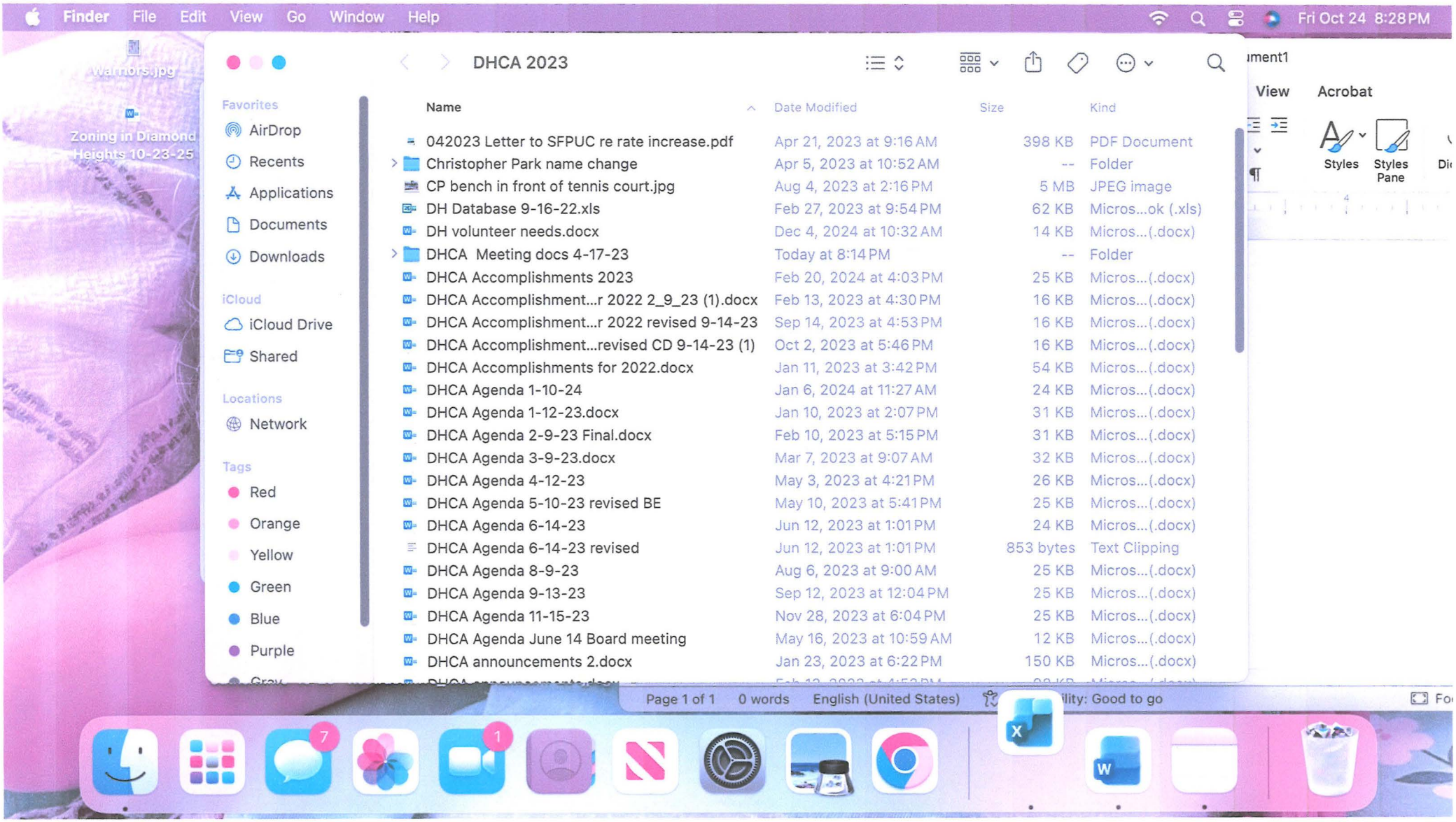
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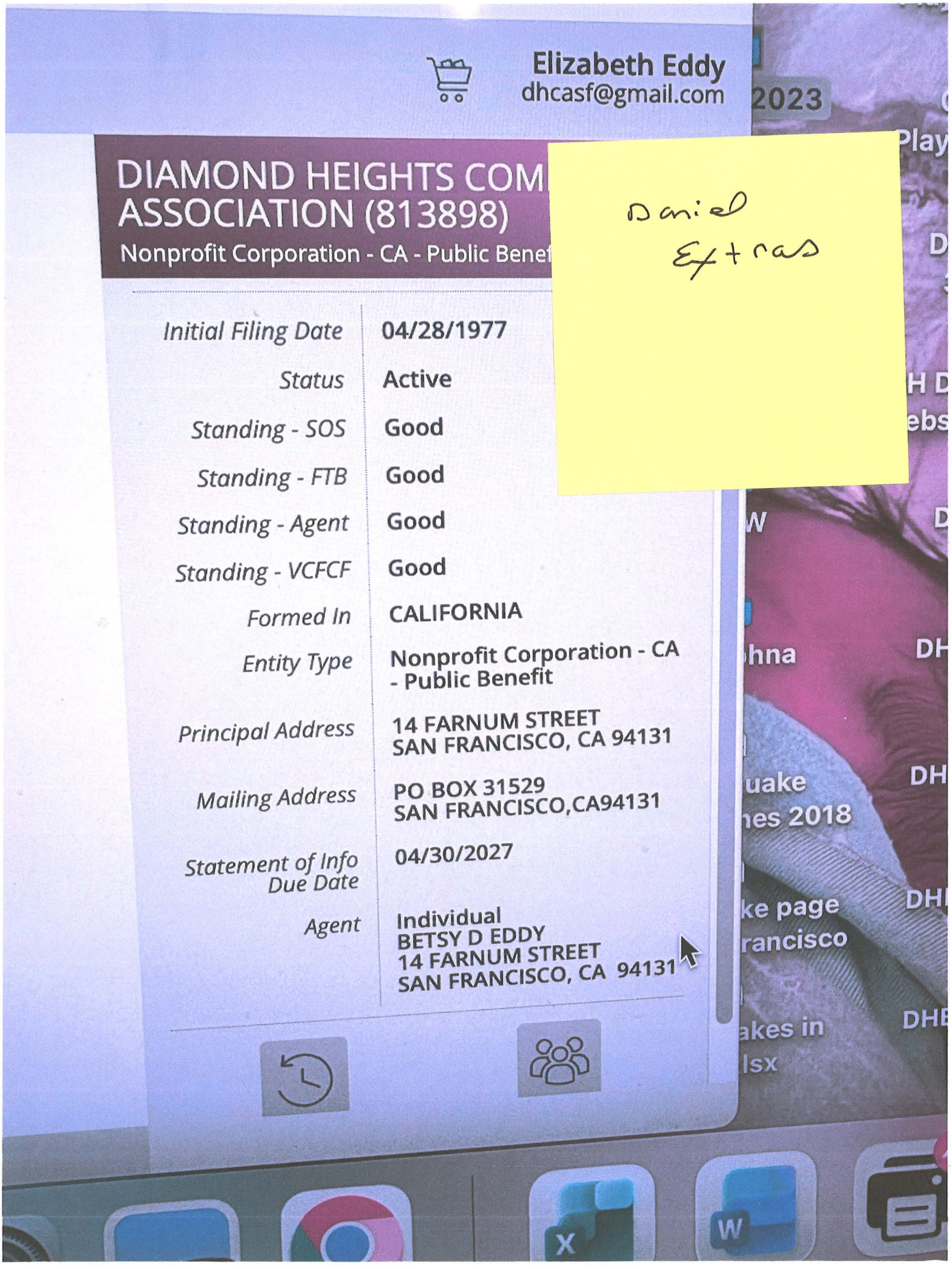
This is not an amended return.

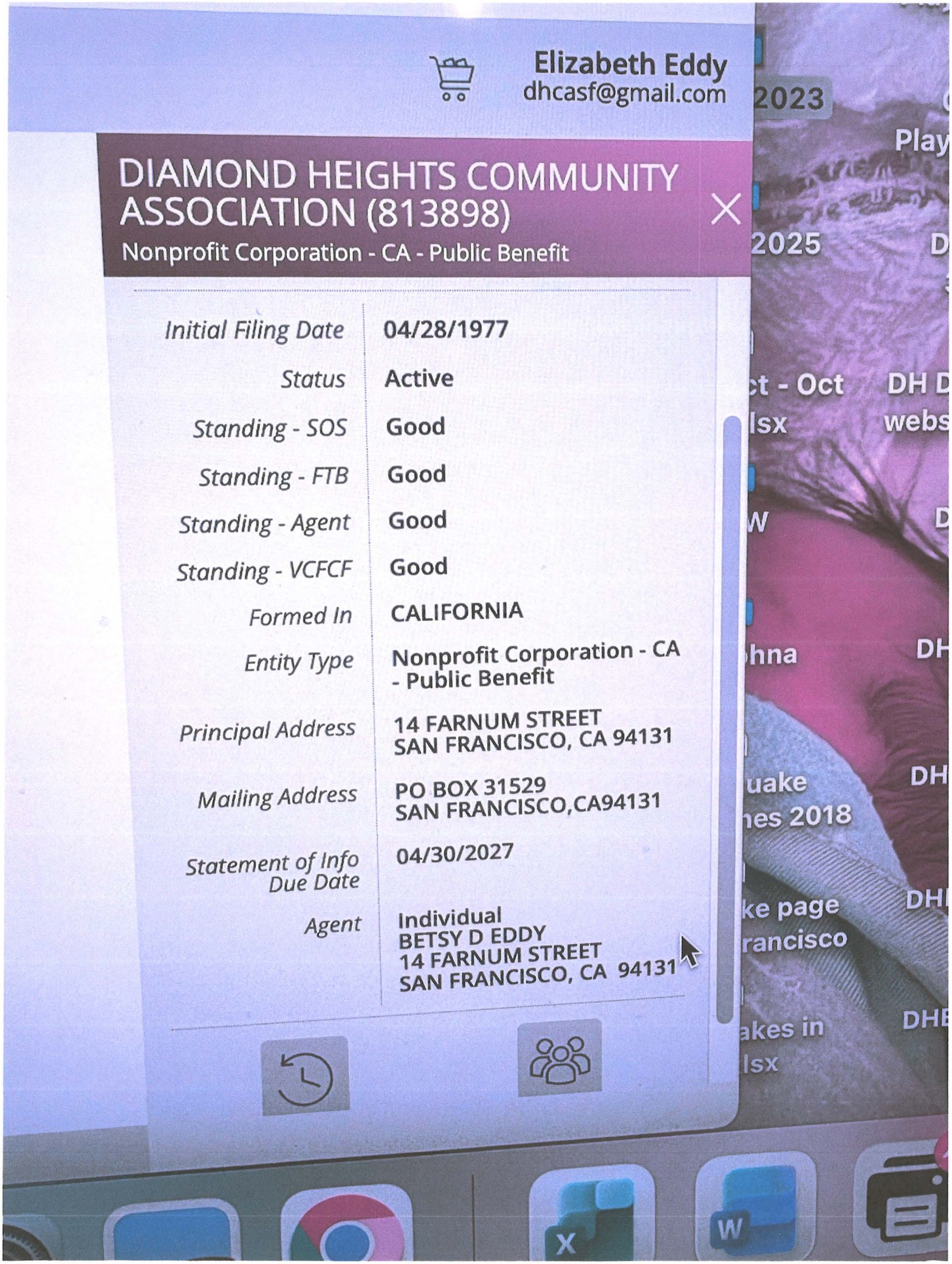
An IRS Form 1023/1024 is not pending.

Entity Information

FEIN:


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Warriors.jpg
Zoning in Diamond Heights 10-23-25
DHCA 2023
Favorites
AirDrop
Recents
Applications
Documents
Downloads
iCloud
iCloud Drive
Shared
Locations
Network
Tags
Red
Orange
Yellow
Green
Blue
Purple
Name
Date Modified
Size
Kind
042023 Letter to SFPUC re rate increase.pdf Apr 21, 2023 at 9:16 AM 398 KB PDF Document
Christopher Park name change Apr 5, 2023 at 10:52 AM -- Folder
CP bench in front of tennis court.jpg Aug 4, 2023 at 2:16 PM 5 MB JPEG image
DH Database 9-16-22.xls Feb 27, 2023 at 9:54 PM 62 KB Micros...ok (.xls)
DH volunteer needs.docx Dec 4, 2024 at 10:32 AM 14 KB Micros...(.docx)
DHCA Meeting docs 4-17-23 Today at 8:14 PM -- Folder
DHCA Accomplishments 2023 Feb 20, 2024 at 4:03 PM 25 KB Micros...(.docx)
DHCA Accomplishment...r 2022 2_9_23 (1).docx Feb 13, 2023 at 4:30 PM 16 KB Micros...(.docx)
DHCA Accomplishment...r 2022 revised 9-14-23 Sep 14, 2023 at 4:53 PM 16 KB Micros...(.docx)
DHCA Accomplishment...revised CD 9-14-23 (1) Oct 2, 2023 at 5:46 PM 16 KB Micros...(.docx)
DHCA Accomplishments for 2022.docx Jan 11, 2023 at 3:42 PM 54 KB Micros...(.docx)
DHCA Agenda 1-10-24 Jan 6, 2024 at 11:27 AM 24 KB Micros...(.docx)
DHCA Agenda 1-12-23.docx Jan 10, 2023 at 2:07 PM 31 KB Micros...(.docx)
DHCA Agenda 2-9-23 Final.docx Feb 10, 2023 at 5:15 PM 31 KB Micros...(.docx)
DHCA Agenda 3-9-23.docx Mar 7, 2023 at 9:07 AM 32 KB Micros...(.docx)
DHCA Agenda 4-12-23 May 3, 2023 at 4:21 PM 26 KB Micros...(.docx)
DHCA Agenda 5-10-23 revised BE May 10, 2023 at 5:41 PM 25 KB Micros...(.docx)
DHCA Agenda 6-14-23 Jun 12, 2023 at 1:01 PM 24 KB Micros...(.docx)
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DHCA Agenda 8-9-23 Aug 6, 2023 at 9:00 AM 25 KB Micros...(.docx)
DHCA Agenda 9-13-23 Sep 12, 2023 at 12:04 PM 25 KB Micros...(.docx)
DHCA Agenda 11-15-23 Nov 28, 2023 at 6:04 PM 25 KB Micros...(.docx)
DHCA Agenda June 14 Board meeting May 16, 2023 at 10:59 AM 12 KB Micros...(.docx)
DHCA announcements 2.docx Jan 23, 2023 at 6:22 PM 150 KB Micros...(.docx)
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Page 1 of 1
0 words
English (United States)


Elizabeth Eddy
dhcasf@gmail.com
DIAMOND HEIGHTS COM
ASSOCIATION (813898)
Nonprofit Corporation - CA - Public Benef
Daniel
Extras
Initial Filing Date 04/28/1977
Status Active
Standing - SOS Good
Standing - FTB Good
Standing - Agent Good
Standing - VCFCF Good
Formed In CALIFORNIA
Entity Type Nonprofit Corporation - CA - Public Benefit
Principal Address 14 FARNUM STREET SAN FRANCISCO, CA 94131
Mailing Address PO BOX 31529 SAN FRANCISCO,CA94131
Statement of Info Due Date 04/30/2027
Agent Individual BETSY D EDDY 14 FARNUM STREET SAN FRANCISCO, CA 94131


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Christopher Park Name Under Scrutiny

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Date and Time of Public Hearing
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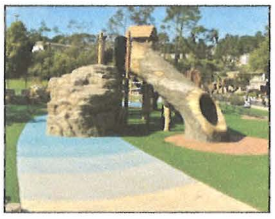
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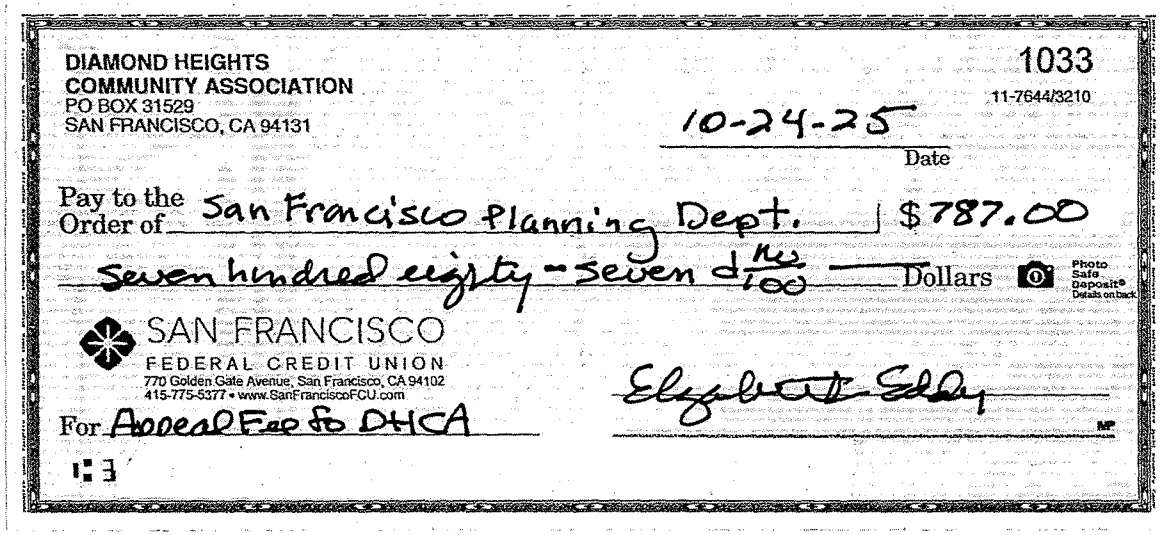
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COMMUNITY ASSOCIATION
PO BOX 31529
SAN FRANCISCO, CA 94131

1033
11-7644/3210

10-24-25
Date

Pay to the Order of San Francisco Planning Dept. $787.00

Seven hundred eighty-seven dollars and no/100 Dollars

Photo Safe Deposit® Details on back

SAN FRANCISCO
FEDERAL CREDIT UNION
770 Golden Gate Avenue, San Francisco, CA 94102
415-775-5377 • www.SanFranciscoFCU.com

For Appeal Fee to DHCA

Elizabeth Eddy

⑆ ⑈

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; "timwolfred@aol.com"; "dhcasf@gmail.com"; "lentzplanning@gmail.com"; "cb720d@att.com"; "cammy.blackstone@att.com"; Mitchell Tsai; Omar Corona
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Merlone, Audrey (CPC); Gluckstein, Lisa (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	APPELLANT CORRESPONDENCE: Hearings - Appeal of CEQA Exemption Determination and Conditional Use Authorization - Proposed 350 Amber Drive Project - February 10, 2026
Date:	Friday, January 30, 2026 1:07:38 PM
Attachments:	image001.png

Greetings,

The Office of the Clerk of the Board is in receipt of supplemental information from the Appellant, Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association, for the Special Order before the Board of Supervisors on **February 10, 2026**, at 3:00 p.m. for the appeals of CEQA Exemption Determination and Conditional Use Authorization for the proposed project at 350 Amber Drive.

Please find the following link to the document for the matter:

Appellant Supplemental Information - 1/30/2026

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251094
Board of Supervisors File No. 251098

Best regards,
Jocelyn Wong
Legislative Clerk
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T: 415.554.7702 | F: 415.554.5163
jocelyn.wong@sfgov.org | www.sfbos.org

Click here to complete a Board of Supervisors Customer Service Satisfaction form

The Legislative Research Center provides 24-hour access to Board of Supervisors legislation, and archived matters since August 1998.

Disclosures: *Personal information that is provided in communications to the Board of Supervisors is subject to disclosure under the California Public Records Act and the San Francisco Sunshine Ordinance. Personal information provided will not be redacted. Members of*

the public are not required to provide personal identifying information when they communicate with the Board of Supervisors and its committees. All written or oral communications that members of the public submit to the Clerk's Office regarding pending legislation or hearings will be made available to all members of the public for inspection and copying. The Clerk's Office does not redact any information from these submissions. This means that personal information—including names, phone numbers, addresses and similar information that a member of the public elects to submit to the Board and its committees—may appear on the Board of Supervisors' website or in other public documents that members of the public may inspect or copy.

P: (626) 314-3821
E: info@mitchtsailaw.com

Mitchell M. Tsai
Law Firm

139 S. Hudson Ave., Suite 200
Pasadena, California 91101

VIA E-MAIL

January 30, 2026

City and County of San Francisco, Board of Supervisors
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689
Em: Board.of.Supervisors@sfgov.org; bos.legislation@sfgov.org

RE: Appeal of Planning Commission's Approvals for 350 Amber Drive Project on September 25, 2025 – California Environmental Quality Act (CEQA) Determination and Conditional Use Authorization (CUA) and Shadow Findings – (Record No. 2024-004318ENV) (2024-004318CUASHD)

Dear Board of Supervisors ("**Board**"),

On behalf of Diamond Heights Community Association ("**Appellant**"), our Office is submitting this correspondence for the February 10, 2026 public hearing regarding appeals of the City and County of San Francisco ("**City**" or "**County**") Planning Commission's ("**Commission**") approvals on September 25, 2025 for the development project proposed to be located at 350 Amber Drive in the City (Record No. 2024-004318ENV) ("**Project**"), including a) the California Environmental Quality Act ("**CEQA**") Exemption Determination; and b) Approval of Conditional Use Authorization ("**CUA**") and Shadow Findings.

The Diamond Heights Community Association is an organization of City residents and property owners near the Project site with a strong interest in well ordered land use planning and in addressing the environmental impacts of the Project, including potential impacts on the adjacent Glen Canyon Park and its natural and biological resources. Individual members of the Diamond Heights Community Association live, work, and recreate in the Project vicinity and may therefore be directly affected by the Project.

The City describes the proposed Project as "the installation of a new AT&T Wireless Macro Wireless Telecommunications Services (WTS) Facility on an approximately 104-foot-tall monopole located at the rear of the San Francisco Police Academy. The

WTS facility will consist of twelve (12) new antennas, nine (9) new remote radio units, three (3) tower mounted DC-9 surge suppressors, one (1) GPS unit mounted on proposed outdoor equipment cabinet, one (1) walk-up cabinet, and one (1) 30kw DC generator with a 150-gallon diesel fuel tank on a concrete pad. The ancillary equipment will be surrounded by an 8' chain link fence." (*See* September 25, 2025 San Francisco Planning Commission, Executive Summary, pp. 1-2).

Pursuant to Sections 31.04 and 31.16 of the City Administrative Code, and Section 308.1 of the City Planning Code, our office is submitting this additional correspondence in support of its original appeals and in reply to the Project Sponsor's Response. On appeal, the Board of Supervisors is not limited to the Commission's earlier analysis or findings and may conduct its own independent review of whether the Commission's findings were proper and adequately supported. The Board shall consider anew all facts, evidence and issues related to the adequacy, accuracy and objectiveness of the CEQA decision, including, but not limited to, the sufficiency of the CEQA decision and the correctness of its conclusions. Admin. Code Section 31.16(b)(6).

The Appellant expressly reserves the right to supplement this letter with additional evidence and materials at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, Section 65009(b); Pub. Res. Code, Section 21177(a).

Lastly, the Appellant fully incorporates by reference all the comments and concerns raised to date on the Project or its environmental CEQA clearance, including Appellant's own correspondence in support of its appeals of the Project's CEQA Exemption Determination and CUA and Shadow Findings, submitted to the Board on October 27, 2025, November 26, 2025, and December 3, 2025. *See Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

I. THE PROJECT IS FACIALLY INELIGIBLE FOR THE CEQA CLASS 3 CATEGORICAL EXEMPTION IT SEEKS BASED ON THE PLAIN STATUTORY TEXT, AND THE BOARD OF SUPERVISORS MAY LAWFULLY DENY THE PROJECT ON THAT BASIS ALONE.

The Board's lawful authority to deny the proposed Project under state law, and CEQA specifically, is rather simple: it merely needs to determine that the Project is not eligible for the CEQA exemption it seeks, as the administrative record and evidence overwhelmingly indicates that it is not.

The Planning Commission's determination that the Project is exempt from further environmental review under the CEQA Class 3 categorical exemption is legally indefensible. The plain statutory text of the CEQA Guidelines clearly limits the application of Class 3 exemptions to the "construction and location of limited numbers of new, small facilities or structures." CEQA Guidelines Section 15303. The proposed Project, described as the "installation of a new AT&T Wireless Macro Wireless Telecommunications Services (WTS) Facility on an approximately 104-foot-tall monopole," fundamentally conflicts with the statute's explicit mandate for ***small structures***. A 104-foot-tall wireless tower is by no reasonable standard a "small facility" and its sheer scale renders it incompatible and ineligible for the relief sought under the Class 3 exemption.

Furthermore, the Project's scope and specifications confirm its ineligibility for the Class 3 exemption, especially when compared to the statutory examples provided in the CEQA Guidelines. The Project involves constructing a free-standing, independent, massive tower and ancillary equipment, including twelve new antennas, nine new remote radio units, and a 30kW DC generator with a 150-gallon diesel fuel tank on a concrete pad. The Project's significant scale clearly exceeds the scope of the enumerated examples, such as single-family residences or small commercial buildings not exceeding 10,000 square feet. Additionally, the Project is fundamentally incompatible with Class 3 criteria because it entails the installation and operation of the 150-gallon diesel fuel tank, thereby involving "hazardous substances" and posing a "significant risk of exposure to hazardous substances" in the vicinity. The facts regarding the Project's substantial development demonstrate that the Planning Commission's finding of exemption is flawed as a matter of law and must now be reversed.

II. EVEN IF THE PROJECT WERE ELIGIBLE FOR THE CEQA CLASS 3 CATEGORICAL EXEMPTION, *SEVERAL EXCEPTIONS* APPLY THAT MAKE IT INELIGIBLE AND THEREFORE TRIGGER ADDITIONAL ENVIRONMENTAL REVIEW, INCLUDING PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT.

Even if the Project were eligible for the Class 3 Categorical Exemption, it would nonetheless be subject to further environmental review under CEQA Guidelines Section 15300.2 based on several exceptions, including its location, cumulative impacts, significant effects, and impacts on historical resources. 14 CCR Section 15300.2. CEQA Guidelines Section 15300.2 provides several "exceptions" that trigger additional environmental review, even if a project is otherwise eligible for an exemption, including the Class 3 categorical exemption this Project seeks. The Project here implicates several of those exceptions, clearly indicating the need for additional environmental review under CEQA.

First, the Project's placement directly implicates the **location** exception under CEQA Guidelines Section 15300.2(a) because the facility is proposed in a particularly sensitive environment, demanding extensive environmental review. The Project is situated near Glen Canyon Park, which is identified as one of San Francisco's 31 significant natural resource areas (SNR). The significant nature of this adjacent habitat, known for rare species and a vital wildlife corridor, mandates heightened scrutiny, especially when considering the Project's location atop an infill site with a recorded history of seismic activity. The installation of a massive 104-foot tower requiring deep mounting in unstable soils creates a potential for landslides and ground failure, directly threatening the nearby natural resources and recreational areas. The Project's significant and undeniable risks elevate it well beyond the threshold of being "ordinarily insignificant."

Second, the Project falls under the **significant effect** exception due to the *unusual circumstance*s surrounding its hazardous components and severe potential consequences. The Project's installation includes a 150-gallon diesel fuel tank for the generator, which introduces chemical hazards and the potential for leaks that could release benzene, a known carcinogen, into this environmentally sensitive area. The Project's threat of chemical contamination, coupled with the proven fire risks associated with wireless facilities and the Project's proximity to a grove of highly flammable eucalyptus trees, creates an unusually dangerous condition. The Project's

combined seismic, chemical, fire, and other hazards constitute a reasonable, and even likely, possibility of a significant effect on the environment, particularly impacting the nearby children's playground, residences, and the natural resources of Glen Canyon Park.

Lastly, the Project triggers the **cumulative impact** and **historical resources** exceptions, requiring an Environmental Impact Report (EIR) to comprehensively analyze all compounded effects. Approving a "macro" facility of such substantial size and type could set a precedent, leading to the proliferation of similar wireless facilities and resulting in a cumulatively significant impact over time. Moreover, in the foreseeable event of a fire or landslide, the Project poses a threat to many nearby structures, including many of architectural or special significance to the City and its residents. Since the Project may cause a substantial adverse change in the significance of this potential historical resource, the Planning Commission erred in attempting to exempt it from further environmental review under the Class 3 category.

In sum, the Board may lawfully deny the proposed Project simply on the grounds that it does not comply with CEQA because it is not eligible for or compatible with the categorical exemption that it seeks.

III. THE BOARD OF SUPERVISORS MAY LAWFULLY DENY THE PROJECT WITHOUT EFFECTIVELY PROHIBITING WIRELESS SERVICE OR VIOLATING FEDERAL LAW BECAUSE THE PROJECT SPONSOR CANNOT ESTABLISH A SIGNIFICANT COVERAGE GAP AND THERE ARE OTHER LESS INTRUSIVE ALTERNATIVES TO THE PROPOSED PROJECT.

From the outset, it is important to note that the federal law issues raised by the Project Sponsor in their Response, including issues under the Telecommunications Act (TCA), are outside the relevant scope of the subject appeals. Specifically, Appellant's appeals solely ask the Board to review the Planning Commission's prior determinations regarding the Project's CEQA Exemption, CUA approval, and related Shadow Findings; not to review the Project's consistency with federal law. However, the Project Sponsor's Response introduces new issues under federal law that are tangential and indirectly related to the Planning Commission's prior determinations or the Project's entitlements. As such, the Project Sponsor suggests that the Project's required compliance with CEQA and the City's own land use framework must yield to federal law, but that is not the case.

On the contrary, Appellant asserts that denying the Project would not violate federal law or constitute an "effective prohibition" of wireless coverage as the Project Sponsor argues. Thus, the Board may lawfully deny the project without effectively prohibiting wireless service or violating federal law because doing so would not violate the TCA or conflict with federal law, whereas it is required under state law. Indeed, without presenting any conflict between federal, state, and local laws, the Board is required to deny the Project because it clearly violates CEQA, as explained above.

In its response to Appellant's appeal(s), the Project Sponsor raises new issues under federal law that are outside the scope of the appeal(s) and unrelated to the Project's entitlements that are at issue. Thus, the Sponsor suggests that, independent of state and local laws, the Board must approve the Project as proposed or risk violating federal law. This is not so. First, as outlined above, the Board may lawfully deny the Project based on its ineligibility for the CEQA Class 3 Categorical Exemption alone. Indeed, the Board may not lawfully approve a Project that clearly contravenes CEQA and avoids the requisite environmental review. Second, even considering the federal law issues raised by the Project Sponsor, the Board may still lawfully deny the Project without creating an effective prohibition.

In its Response to the Appellant's appeals on December 3, 2025, AT&T Wireless (AT&T), (Project "Applicant" or "Sponsor") argues that "the City's denial of the Project would amount to an effective prohibition and a violation of federal law" (See Project Sponsor Response, p. 4) and further that "Approval of the Project CUA Comports with Federal Law and Avoids an Unlawful Prohibition." (*See* Project Sponsor Response, p. 18). In support of this argument, the Project Sponsor explains that legal standard for an "effective prohibition" is met "when a wireless provider demonstrates (1) a significant gap in wireless service coverage, and (2) that the Project would provide the "least intrusive means," in relation to the land use values embodied in local regulations, to provide the service coverage necessary to fill that gap." (*Id.*) (*citing Metro PCS, Inc. v. City and County of San Francisco*, 400 F.3d 715, 734-35 (9th Cir. 2005).

However, as further explained below, the Project Sponsor relies on a two-part legal standard for "effective prohibition" that has gradually been replaced by a different legal standard that turns on whether a regulation "materially inhibits" wireless coverage. The "materially inhibits" standard has been specifically endorsed by the Ninth Circuit more recently and more closely mirrors or aligns with the Federal

Communications Commission's (FCC) own standard for evaluating effective prohibition.

Nevertheless, even under the two-part legal standard that the Project Sponsor advocates for, denial of the proposed Project would not constitute an effective prohibition and would therefore not violate federal law, including the Telecommunications Act.

A. The Project Sponsor fails to establish a significant gap in wireless service coverage that justifies or supports the proposed Project.

First, the Project Sponsor showing of a "significant gap in wireless coverage" is unsubstantiated, predicated on incomplete or inaccurate information, unverifiable, and has since been revised following the Planning Commission's determination on September 25, 2025.

From the Appellant's perspective, the technical demonstration of a significant coverage gap is highly questionable and refutable because AT&T failed to provide key supporting data for independent scrutiny. The Sponsor relies on "industry-standard" coverage maps generated by a sophisticated tool called Atoll, but these are merely simulations based on complex datasets. While the maps were peer-reviewed and verified by an independent drive test, AT&T did not present the raw drive test data itself for full examination. This omission prevents a comprehensive and independent technical evaluation of the claimed weak signal levels. Without the underlying data, the claimed "significant gap" remains a projection rather than an independently and empirically verifiable fact. The Project Sponsor asks the City and Board to wholly rely on its own representations and calculations regarding wireless coverage even if they cannot be independently ascertained.

Furthermore, the Project fails to technically justify the necessity for such a large facility to solve the problem of reliable in-building service. The Sponsor acknowledges that other online coverage maps, including their own website, show ***some existing*** coverage in the area. The crucial difference is apparently the need for reliable in-building service. AT&T claims that a signal in the yellow, blue, or white shading on their map is inadequate and constitutes a service coverage gap, necessitating the new monopole. However, the proposal does not sufficiently demonstrate why the coverage gap cannot be addressed with a smaller, less intrusive solution, such as an alternative site or design that provides sufficient line-of-sight without the massive 104-foot

structure. AT&T's analysis did not identify any available, feasible, and less intrusive alternative.

Finally, the Project Sponsor's argument that this facility is absolutely essential for FirstNet service is also an overstatement that misrepresents the current state of public safety coverage in the area. The Sponsor concedes that 4G LTE service on 700 MHz is the platform for all FirstNet services in San Francisco. However, their own documentation shows an "Existing LTE 700 Coverage" map, indicating that ***some signal already exists*** from surrounding sites, even if it is deemed inadequate. Therefore, the Project is not generating FirstNet coverage from a state of total absence, but is instead designed to raise the existing service level from occasionally poor quality (yellow, blue, or white shading) to a higher, more reliable standard. Thus, the Project represents an improvement to an existing service, not a necessary provision to create and sustain service altogether. The crucial distinction between improving existing coverage versus introducing new coverage where it does not exist challenges and directly undercuts the Project Sponsor's claim of necessity, suggesting that a material inhibition of service may not exist as strenuously as argued or as has been represented.

Thus, the Project Sponsor has failed to demonstrate that a significant gap exists in wireless coverage warranting the proposed Project.

B. <u>The Project Sponsor has failed to establish that the Project is the least intrusive means to provide wireless coverage because other viable alternatives exist that were summarily rejected or not fully evaluated.</u>

The Project Sponsor further cannot establish that the proposed Project would be the "less intrusive means" to provide wireless service coverage in light of the City's land use framework. From the Appellant's perspective, the Project Sponsor has failed to prove that the proposed 104-foot monopole is truly the least intrusive means to close the alleged coverage gap. The Project Sponsor's own documentation confirms that it conducted a comprehensive alternative sites analysis, reviewing seven other properties, but the reasons for rejecting these sites appear weak or generalized at best. For instance, three of the four Preference 1 sites (480 Teresita Blvd, 5200 Diamond Heights Blvd, and 5210 Diamond Heights Blvd) were rejected simply because the "Property owner was not interested." Such abbreviated rejection indicates a failure of immediate availability, not necessarily technical feasibility, suggesting that the Project Sponsor did not fully pursue the more preferable locations identified by the City's own siting guidelines.

The Project Sponsor's rejections of other alternative sites based on technical limitations are also questionable, suggesting an insufficient effort to find a less intrusive structural compromise. The co-location site (5285 Diamond Heights Blvd) and the commercial rooftop site (5214 Diamond Heights Blvd) were rejected because they would not provide "sufficient signal to coverage objective area." The core objective is providing reliable "in-building service," which demands a significantly stronger signal than outdoor coverage. The Project Sponsor's rejection of lower-height options because they couldn't meet this high standard for in-building service implies they prioritized their absolute signal threshold over finding a solution with less visual impact on the community.

Lastly, the Project Sponsor failed to provide evidence that they considered a range of less intrusive design alternatives beyond a single massive monopole. If the inability to provide the target in-building coverage is the primary technical impediment to less intrusive sites, the Sponsor should have analyzed smaller facilities or Distributed Antenna Systems (DAS) that could achieve similar coverage goals with a reduced physical footprint or height. The lack of demonstrated design flexibility renders the claim of "least intrusive means" hollow, as only one extremely intrusive option was ultimately deemed feasible. In other words, the Project Sponsor's unwillingness and refusal to even consider design alternatives also undercuts its claim that the proposed Project site is the one and only viable and feasible option.

Thus, the Project Sponsor has also failed to meet its burden of showing that the proposed Project is the least intrusive option in light of other viable alternatives.

C. Because the Project Sponsor has not made a prime facie showing that denying the Project would be an effective prohibition, the City and Board need not identify the availability of other potential or feasible alternatives.

In the Ninth Circuit, the burden shifts to the local government to identify an available, feasible, and less intrusive alternative *only after* the provider makes a sufficient prima facie showing of effective prohibition. *T-Mobile USA, Inc. v. City of Anacortes*, 572 F.3d 987, 995-99 (9th Cir. 2009). Here, the Project Sponsor has failed to establish a prima facie case that denial of its proposed Project would effectively prohibit wireless service, therefore the City and Board are under no obligation to identify alternative sites. In other words, the Project Sponsor has not met its own burden and can therefore not shift the burden to the City or Board. Specifically, the Project Sponsor cannot establish the existence of a significant coverage gap when there is existing

coverage at and surrounding the Project site. Given the arbitrary rejection of multiple preferential sites based solely on owner disinterest, and the failure to present a spectrum of design alternatives to meet the coverage objective, among others reasons, the Project Sponsor's fails to meet its burden and its initial showing of "least intrusive means" is weak at best. Therefore, the City or Board is under no obligation to identify a replacement site, and the Planning Commission's approval based on this flawed premise should be reversed.

D. The Board may lawfully deny the proposed Project without effectively prohibiting wireless service or violating federal law because denial would not materially limit or inhibit the ability of providers to compete.

In the *City of Portland v. United States*, the Ninth Circuit clarified and held that the relevant legal test for determining an effective prohibition is whether denial would "materially inhibit" the ability of providers "to compete in a fair and balanced legal and regulatory environment." 969 F.3d 1020, 1034-35 (9th Cir. 2020). In doing so, the Ninth Circuit affirmed the FCC's own policy and guidance for determining "effective prohibition" of wireless coverage under the TCA as articulated in the FCC's *Small Cell Order*. *See In the Matter of California Payphone Association Petition for Preemption, Etc., Opinion and Order*, FCC 97-251, 12 FCC Rcd 14191 (July 17, 1997) (adopting material inhibition test). Thus, a court reviewing the Board's denial of the Project would be more likely to apply the "material inhibition" standard endorsed in *City of Portland* rather than the two-part test articulated in *MetroPcs*.

In its Response, the Project Sponsors acknowledges and even concedes that the relevant legal test for determining an "effective prohibition" is whether denial "materially inhibits" wireless service coverage. (*See Project Sponsor Response*, pp. 18-19). However, beyond acknowledging the applicability of this legal test, the Project Sponsor does not attempt to show or establish how denying the proposed Project would satisfy that standard, instead relying on the two-part test.

Under the "material inhibition" standard, effective prohibition turns on whether an agency action would "materially inhibit" the ability of providers "to compete in a fair and balanced regulatory environment." *City of Portland*, 969 F. 3d at 1034-35. Here, from the Appellant's perspective, denying the Project would not meet the stringent "material inhibition" test because AT&T's own evidence demonstrates existing service and merely targets an ***improvement*** in quality. The "Existing LTE 700 Coverage" map provided by the Sponsor clearly shows that the area is not entirely devoid of signal; rather, portions are shaded yellow or blue, indicating existing service that is simply less

reliable for in-building use. Material inhibition, by its definition in FCC and Ninth Circuit case law, typically prevents the provision of a new service, restricts the entry of a new provider, or substantially impedes the improvement of existing services altogether. However, since AT&T's primary goal is to upgrade the reliability of service to an "in-building standard" and enhance the existing FirstNet platform, a denial would not constitute a complete or effective prohibition of service to the area.

Furthermore, the Sponsor fails to demonstrate that an **improvement** to in-building reliability is materially inhibited when multiple, more preferable sites were rejected solely due to owner unwillingness, limited interest, or other perfunctory reasons. Three Preference 1 sites (480 Teresita Blvd, 5200 Diamond Heights Blvd, and 5210 Diamond Heights Blvd) were discarded because the "property owner was not interested." The burden of proof for the least intrusive means test requires AT&T to go further and exhaust all available and feasible alternatives before claiming a denial amounts to effective prohibition. Since AT&T did not overcome basic issues of site availability on preferable public and church properties, it cannot now persuasively argue that a denial of the single most intrusive, 104-foot monopole on the police academy property **materially inhibits** their service when it independently abandoned legally preferable alternatives based on non-technical grounds. Consequently, a denial of the Project is simply a rejection of a specific, highly intrusive proposal, not a systemic prohibition of wireless service improvement that arises to a material inhibition of effective prohibition of wireless service entirely.

IV. THE BOARD MAY LAWFULLY CONSIDER THE PROJECT'S AESTHETIC IMPACTS IN DENYING THE PROJECT WITHOUT EFFECTIVELY PROHIBITING WIRELESS SERVICE, INCLUDING THE CITY'S OWN ACKNOWLEDGEMENT AND DETERMINATION THAT THE PROJECT WILL HAVE SIGNIFICANT IMPACTS ON AESTHETICS IN THE CONDITIONAL USE AUTHORIZATION (CUA) SHADOW FINDINGS.

The Ninth Circuit has recognized that aesthetic concerns constitute legitimate grounds for denying wireless facility applications when properly supported by substantial evidence and based on more than just generalized concerns. For example, in *Sprint PCS Assets, LLC v. City of Palos Verdes Estates*, the court held that "the City's finding, in denying wireless telecommunications provider's permit applications to construct two wireless telecommunications facilities (WCFs) in the city's public

rights-of-way, that the proposed WCFs would adversely affect its aesthetic makeup was supported by 'substantial evidence' under the Telecommunications Act, where the city council reviewed propagation maps and mock-ups of the proposed WCFs and a report that detailed the aesthetic values at stake." 583 F.3d 716, 726 (9th Cir. 2009). Congress has also expressly acknowledged "that there are legitimate state and local concerns involved in regulating the siting of (wireless services) facilities, such as aesthetic values and the costs associated with the use and maintenance of public rights-of-ways" *See T-Mobile USA, Inc. v. The City of Anacortes*, 2008 WL 3412382 at *2 (W.D. Wash. July 18, 2008).

In *Sprint Telephony PCS, L.P. v. County of San Diego*, the Ninth Circuit held that an ordinance did not effectively prohibit wireless services where "none of the requirements, individually or in combination, prohibited the construction of sufficient facilities to provide wireless services in the county, and while a zoning board could exercise its discretion to effectively prohibit the provision of wireless services, it was equally true that a zoning board would exercise its discretion to balance the competing goals of the ordinance, which were the provision of wireless services and other public goals such as safety and aesthetics." 543 F.3d 571, 578 (9th Cir. 2008).

Here, the Board of Supervisors can and should deny this Project based on its substantial negative aesthetic impacts, demonstrating that Appellant's and the overall neighborhood's concerns are far beyond mere generalized opposition or "Not In My Backyard" (NIMBY) sentiment. The proposed Project proposes a massive, industrial 104-foot monopole, which AT&T claims is *only* minimally higher than the surrounding mature trees by 10 to 20 feet. The Project's massive 104-foot structure is not a discreet rooftop antenna but a significant industrial intrusion into a residential, park-adjacent area classified as a Preference 1 site under City guidelines. The Appellant and other public commenters have explicitly raised "zoning and height inconsistencies" and detrimental aesthetic impacts that, when considered alongside the Project's failure to meet the least intrusive means test, elevate these aesthetic objections to the level of substantial evidence. The sheer size and nature of this facility, including the adjacent 30kw generator and 150-gallon diesel fuel tank, create a uniquely adverse visual impact that directly contradicts the CUA finding regarding compatibility with the neighborhood.

The Project Sponsor's argument that the Project's aesthetic concerns are merely "generalized" and therefore non-substantial is incorrect because the neighborhood's objections directly relate to the Project's non-compliance with the City's own local land

use policies and values, including the General Plan. The Project site is near the San Francisco Police Academy, which is adjacent to the public P-OS (Public Open Space) zoned Glen Canyon Park, and the visual impact therefore affects public spaces as well as private views. AT&T's visual analysis uses photosimulations taken only from public vantage points, ignoring the explicitly raised concerns that views from neighboring homes and private views are substantially impacted. Further, the Project Sponsor's own analysis only compares the monopole to the height of surrounding trees, confirming the structure will protrude above the canopy, creating a skyline violation that dramatically alters the visual character of this scenic area, and a key public welfare issue that supports denial. Denying a project based on its detrimental effect on the neighborhood's aesthetic character, when that design is demonstrated to be unnecessarily large and intrusive, is a legitimate exercise of local authority supported by substantial evidence.

Further, the aesthetic impact merges with the failure to explore less intrusive means, compounding the argument for denial under federal law. AT&T asserts its facility must be this high (104 feet) to provide reliable in-building service, a high-quality service threshold. However, the documentation reveals that less intrusive, preferential sites, like the lower rooftop at 5200 Diamond Heights Blvd or the co-location site at 5285 Diamond Heights Blvd, were rejected specifically because they would not provide this optimal, high-threshold coverage. Since AT&T demands a 104-foot structure to meet its self-imposed optimal service standard, thereby guaranteeing the severe aesthetic impact complained of, the Board may reject the Project on this basis. Given that the visual impact is the direct consequence of the Project's Sponsor's failure to settle for a feasible, less intrusive alternative that could still provide adequate service (if not optimal in-building service), the Board has substantial evidence that the specific design and height of this Project is incompatible with the neighborhood's welfare and should be denied.

Finally, the Project's negative aesthetic impacts are compounded by the Project's Shadow Findings that confirm negative impacts on sunlight access to neighboring properties and public spaces, constituting a unique and significant aesthetic injury. Because the Planning Commission made "Shadow Findings" when approving the CUA, Appellant asserts that these findings themselves constitute substantial evidence supporting and requiring the Project's denial. A 104-foot structure, protruding above the existing tree line by 10 to 20 feet, will undeniably cast significant, long-lasting shadows that affect adjacent residential parcels and nearby public recreational areas,

such as Glen Canyon Park. The loss of direct sunlight or the creation of vast shadow patterns directly degrades the perceived and actual quality, comfort, and usability of the neighborhood environment, converting a generalized visual objection into a quantifiable, substantial adverse impact on public welfare and neighborhood enjoyment. Denying the project on the grounds of such a palpable intrusion like the literal physical blocking of the sun is a valid aesthetic objection entirely supported by the City's own official Shadow Findings.

The Board may lawfully deny the project pursuant to federal law not only because the Project Sponsor has failed to make a prima facie showing of effective prohibition, but further because there is substantial evidence that the Project would have significant negative impacts to the existing aesthetics, community, and surrounding neighborhood.

V. CONCLUSION

In sum, the Board must now reverse the Planning Commission's approvals for the 350 Amber Drive Project on September 25, 2025 as flawed.

Following a thorough and full public hearing regarding the appeals herein, Appellant urges the Board to determine that the Project does not comply with CEQA and reverse the Project's approvals on that basis.

Should the Board nonetheless permit this controversial Project to move forward, it is legally obligated to approve the CEQA appeal and require the preparation of a full Environmental Impact Report (EIR) for the Project.

Lastly, Appellant respectfully requests that the Board direct City Staff and the Project applicant to address the public's concerns and comments regarding the Project.

Should the City have any questions or concerns regarding this correspondence, please do not hesitate to contact our office.

Sincerely,

Mitchell M. Tsai
Attorney for Appellant

From:	BOS Legislation, (BOS)
To:	BOS Legislation, (BOS); "info@mitchtsailaw.com"; "timwolfred@aol.com"; "dhcasf@gmail.com"; "lentzplanning@gmail.com"; "cb720d@att.com"; "cammy.blackstone@att.com"; Mitchell Tsai; Omar Corona
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Merlone, Audrey (CPC); Gluckstein, Lisa (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS)
Subject:	RE: PROJECT SPONSOR SUPPLEMENTAL RESPONSE - Hearings - Appeal of CEQA Exemption Determination and Conditional Use Authorization - Proposed 350 Amber Drive Project - February 10, 2026
Date:	Tuesday, February 3, 2026 8:25:02 AM
Attachments:	image001.png

Apologies. Updated with the linked document below. Thank you.

Best regards,

Jocelyn Wong
Legislative Clerk
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T: 415.554.7702 | F: 415.554.5163
jocelyn.wong@sfgov.org | www.sfbos.org



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From: BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Sent: Tuesday, February 3, 2026 8:20 AM
To: 'info@mitchtsailaw.com' <info@mitchtsailaw.com>; 'timwolfred@aol.com' <timwolfred@aol.com>; 'dhcasf@gmail.com' <dhcasf@gmail.com>; 'lentzplanning@gmail.com' <lentzplanning@gmail.com>; 'cb720d@att.com' <cb720d@att.com>; 'cammy.blackstone@att.com' <cammy.blackstone@att.com>; Mitchell Tsai <mitch@mitchtsailaw.com>; Omar Corona <omarc@mitchtsailaw.com>
Cc: RUSSI, BRAD (CAT) <Brad.Russi@sfcityatty.org>; JENSEN, KRISTEN (CAT) <Kristen.Jensen@sfcityatty.org>; YANG, AUSTIN (CAT) <Austin.Yang@sfcityatty.org>; RUIZ-ESQUIDE, ANDREA (CAT) <Andrea.Ruiz-Esquide@sfcityatty.org>; Dennis Phillips, Sarah (CPC) <sarah.dennis-phillips@sfgov.org>; Gibson, Lisa (CPC) <lisa.gibson@sfgov.org>; Dwyer, Debra (CPC) <debra.dwyer@sfgov.org>; Navarrete, Joy (CPC) <joy.navarrete@sfgov.org>; Lewis, Don (CPC)

<don.lewis@sfgov.org>; Switzky, Joshua (CPC) <joshua.switzky@sfgov.org>; Teague, Corey (CPC) <corey.teague@sfgov.org>; Tam, Tina (CPC) <tina.tam@sfgov.org>; Sider, Dan (CPC) <dan.sider@sfgov.org>; Merlone, Audrey (CPC) <audrey.merlone@sfgov.org>; Gluckstein, Lisa (CPC) <lisa.gluckstein@sfgov.org>; Watty, Elizabeth (CPC) <elizabeth.watty@sfgov.org>; Ionin, Jonas (CPC) <jonas.ionin@sfgov.org>; Livia, Diane (CPC) <diane.livia@sfgov.org>; Dacey, John (CPC) <John.Dacey@sfgov.org>; Pollak, Josh (CPC) <josh.pollak@sfgov.org>; Lamarre, Julie (BOA) <julie.lamarre@sfgov.org>; Longaway, Alec (BOA) <alec.longaway@sfgov.org>; BOS-Supervisors <bos-supervisors@sfgov.org>; BOS-Legislative Aides <bos-legislative_aides@sfgov.org>; Calvillo, Angela (BOS) <angela.calvillo@sfgov.org>; Somera, Alisa (BOS) <alisa.somera@sfgov.org>; Mchugh, Eileen (BOS) <eileen.e.mchugh@sfgov.org>; BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Subject: PROJECT SPONSOR SUPPLEMENTAL RESPONSE - Hearings - Appeal of CEQA Exemption Determination and Conditional Use Authorization - Proposed 350 Amber Drive Project - February 10, 2026

Greetings,

The Office of the Clerk of the Board is in receipt of a supplemental response from Monchamp Meldrum LLP, on behalf of the project sponsor AT&T, for the Special Order before the Board of Supervisors on **February 10, 2026**, at 3:00 p.m. for the appeals of CEQA Exemption Determination and Conditional Use Authorization for the proposed project at 350 Amber Drive.

Please find the following link to the document for the matter:

Project Sponsor Supplemental Response – February 2, 2026

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251094
Board of Supervisors File No. 251098

Best regards,
Jocelyn Wong
Legislative Clerk
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T: 415.554.7702 | F: 415.554.5163
jocelyn.wong@sfgov.org | www.sfbos.org

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MONCHAMP MELDRUM LLP

To: San Francisco Board of Supervisors
From: Monchamp Meldrum LLP
Date: February 2, 2026
RE: Proposed 350 Amber Drive Project
File No. **251094** – Appeal of CEQA Exemption from Environmental Review;
Case No. 2024-0004318ENV
File No. **251098** – Appeal of Conditional Use Authorization Approval
Case No. 2024-0004318CUA

Our firm represents the applicant AT&T Wireless (AT&T) regarding the appeals by the Diamond Heights Community Association (DHCA) of the approval of the California Environmental Quality Act (CEQA) exemption and Conditional Use Authorization (CUA) for the above-referenced project at 350 Amber Drive in San Francisco (Project). AT&T submitted its opposition to the CEQA appeal on November 26, 2025 (AT&T CEQA Rebuttal) and its opposition to the CUA appeal on December 3, 2025 (AT&T December 3rd CUA Rebuttal). This memorandum and its attachments provide supplemental substantial evidence to support the City's Project approvals. Additionally, this memorandum addresses DHCA's letter of January 30, 2026 (DHCA January 30th Submittal), which furthers their misinterpretation of federal statutes and case law.

I. Executive Summary

AT&T submits expert opinion to the City on the following issues raised by DHCA:

- Slope Instability-Compression/Settlement of Existing Fills: As detailed in the Geist Engineering Geotechnical Executive Summary dated February 2, 2026 (Exhibit A) and the Salem Engineering Geotechnical Engineering Investigation dated January 19, 2026 (Exhibit B), the Project will not increase the risk of slope instability or the potential for future compression/settlement of existing fills. The Vector Engineering Structural Drawings and Structural Calculations dated January 28, 2026 (Exhibits C and D) reflect the recommendations set forth in the Salem Investigation.

- Fire Risk: As explained in the declaration of expert fire investigator (retired) Thomas W. Oldag (Exhibit E), a fire involving a cell tower is not a frequent or expected occurrence. Mr. Oldag states that the Project site does not present a fire risk because of the site's secure location, rigid engineering standards, compliance with NFPA Standards, the climate in the area, and the absence of any

exposed power lines near the proposed tower. Further, the Project will enhance public safety through the deployment of FirstNet in the subject area which puts advanced wireless technologies into the hands of public safety agencies and first responders, including fire fighters.

- Tree Health: As detailed in the Tree Management Experts Arborist Report dated January 28, 2026 (Exhibit F), Certified Arborist Roy Leggitt has provided his expert opinion that the Project poses no threat to the trees adjacent to, or in the vicinity of, the Project site.

- St. Nicholas Antiochian Orthodox Church: As explained in the City Planning Department's December 8, 2025, Memo, the "Church has not been identified as a potential historic resource and there are no identified historical resources in the project's vicinity." Regardless, AT&T has provided expert photosimulations demonstrating the Project would have no discernable visual effects on the Church.

As to DHCA's misinterpretation of federal statutes and case law, as originally set out in AT&T December 3rd CUA Rebuttal, the denial by a permitting entity of an application for a wireless facility amounts to an effective prohibition if the applicant shows that (1) there is a "significant gap" in wireless coverage; and (2) the proposed installation is the "least intrusive means" for closing that gap. AT&T has established its significant coverage gap, demonstrated its efforts at locating a viable location, and shown that the selected site and design are the least intrusive means for closing the gap. To the extent that DHCA opposes the tower on alleged aesthetics, its statements suggesting the tower's negative aesthetic amount to generalized complaints that do not qualify as substantial evidence to support denial of AT&T's application.

II. Project Construction Would Not Increase Risk of Slope Instability or Potential for Future Compression/Settlement of Existing Fills

DHCA makes the unsupported assertion that "infill . . . suggests soil instability" and concludes without evidence that just disturbing the soil during construction might affect the geotechnical area and its groundwaters. Evaluation of geologic conditions is a technical subject, and lay opinion unsupported by factual foundation does not constitute substantial evidence. Although usually not evaluated by the City until building permit review, AT&T has completed a geotechnical engineering investigation, that included soil borings (Exhibit B) and has provided structural drawings and calculations based on that investigation (Exhibits C and D). As explained in the executive summary provided by Geist Engineering (Exhibit A), "[t]he exploration test geotechnical boring B-1 was drilled on December 29 and 30, 2025 to a depth of 86.5 feet below site grade [BSG]. Free groundwater was not encountered" and "[t]he fill soils are conservatively estimated to extend to depths around 85 feet BSG with weathered formational rock material,

encountered between 85 feet and the maximum depth explored of 86.5 feet BSG." The lack of groundwater and presence of formational rock material results in a conclusion that:

> From a geotechnical perspective, provided the recommendations included in the Salem report are followed, the proposed tower construction is not anticipated to have a negative impact on existing site improvements. Construction of the proposed tower improvements would not be anticipated to increase surface water drainage over or into the existing western slope area. Also, the tower construction would not result in a potential for increased saturation of the fills. *Therefore, construction of the project would not result in an increased risk for slope instability or an increase the potential for future compression/settlement of the existing fills that could negatively impact the site and surrounding development.*

The geotechnical expert's conclusion is that the Project will not cause any increased risk for geotechnical or alter groundwater.

As stated in the Salem Engineering Geotechnical Engineering Investigation (Exhibit B), "[b]ased upon the data collected during this investigation, and from a geotechnical engineering standpoint, it is our opinion that the site is suitable for the proposed construction of improvements at the site as planned, provided the recommendations contained in this report are incorporated into the project design and construction." The Structural Drawings and Calculations provided by Vector Engineering are incorporated in the recommendations of the Salem report.

Thus, two expects conclude that the site is suitable for the Project and will not result in any slope instability nor will construction cause any geotechnical or groundwater issues.

III. The Project Will Expand and Improve Emergency Communication Capabilities and is Not a Fire Risk

DHCA claims, without any supporting evidence, that cell towers are fire hazards. Contrary to DHCA's assertions, however, the Project will in fact enhance public safety, including fire safety, by providing decreased fire response times, which reduces fire risk. The Project is part of AT&T's commitment to support public safety through its partnership with FirstNet, the federal First Responder Network Authority. Conceived by the *9/11 Commission Report* as necessary for first responder communications, Congress created the federal First Responder Network Authority, which selected AT&T to build and manage FirstNet, the first-ever nationwide first-responder wireless network. The Project will provide new service on Band 14, which is the nationwide high-quality spectrum set aside by the U.S. government for the exclusive transmission of public safety and first responder communications. Deployment of FirstNet in the subject area will improve

public safety by putting advanced wireless technologies into the hands of public safety agencies and first responders, including fire fighters.

Also contrary to DHCA's assertions, a fire involving a cell tower is not a frequent or expected occurrence. As explained by expert fire investigator (retired) Thomas W. Oldag (Exhibit E):

> Cell towers are not known to randomly catch fire. The proposed AT&T tower and associated equipment will be constructed of noncombustible materials. The associated powerlines and communication lines will be enclosed within the metal structure. Cell towers require electricity to function. The power lines supplying the site will be underground. Wildland fires [like those cited by DHCA] usually occur due to branches falling onto power lines, or power lines making contact with other nearby facilities. There are no exposed power lines associated with the proposed tower, however.
>
> The National Fire Protection Association (NFPA) has a standard for telecommunications facilities, NFPA 76 – Standard for the Fire Protection of Telecommunications Facilities. This prevention guideline was created to minimize fires in telecommunication facilities. The proposed facility will comply with these standards, which mandates the storage of any combustible materials in approved non-combustible containers near or around the facility.
>
> [In relation to the assertion that] it would supposedly be difficult to combat [a cell tower fire] since the power "from the grid" will take time to shut off [, p]ower provided to a macro cell tower, like all commercial power, is stepped down by transformers and regulated to the end user. There are also fuses and breakers built into the system. In the possible event of a fault (arc), the involved fuse or breaker will turn off the power to that phase (power line). The grid at large is not affected. As an example, in a structure fire, firefighters can fight the fire after securing the utilities, power and gas to <u>that</u> structure; they do not need to shut off the power "on the grid," or to the larger area.

Also, in reviewing the Project's location, expert fire investigator Oldag determined that "[w]ildland fire concerns are very low in the Diamond Heights area" because the "neighborhood's elevation and exposure place it directly in the path of the funneled marine layer and westerly winds, so it runs cooler, windier, and foggier than many other San Francisco neighborhoods." Oldag further determined that the Project site does not present a fire risk because of the site's secure location, rigid engineering standards, compliance with NFPA Standards, the higher humidity in the area, and the absence of any exposed power lines near the proposed tower."

To support its appeal, DHCA proffers correspondence from Susan Foster. In opposing the Project, Foster identifies herself a "Fire and Utility Consultant" and an "Honorary Firefighter," but she provides no evidence that she is a fire expert, and there is no available information to suggest that she has any relevant credentials or is qualified to opine on the supposed fire danger presented by a communications tower. Nor is there any information to suggest that Foster has any training in fire prevention or fire science; she is not an electrical engineer, or any type of engineer. According to her LinkedIn page, Foster is a writer with a BA in Psychology and an MSW degree.[1] From her internet presence, Foster's main occupation appears to be the dissemination of what many believe to be misinformation, as a member of the Children's Health Defense (CHD), regarding the "alleged health hazards presented by cell phone and cell tower radiation."[2] Throughout her advocacy, Foster has attempted to convince regulators to implement moratoriums on cell towers in the US and Canada, with a particular focus on the slowing of the deployment of 5G technology.[3] CHD has been recognized by Media Bias/Fact Check (an independent, U.S.-based website that rates news and information sources for their political bias and factual reliability) as "an anti-vaccine nonprofit pseudoscience organization," and "a strong conspiracy and quackery level advocacy group that frequently promotes unsupported claims," that do "not align with scientific consensus regarding vaccines and other scientific matters."[4] This is the very approach Ms. Foster has taken in her unsubstantiated statements submitted in opposition to the Project. None of her statements are backed by science, expertise, or fact. Foster does not have the technical expertise to comment on the likelihood the Facility will catch fire, and the information provided by Foster does not constitute substantial evidence.

The proposed site in this case meets all FCC safety guidelines for RF emissions and all City requirements for safety and design. Foster's challenge to the cell site is in fact nothing but a disguised challenge based on fear of RF emissions. Federal law sets the appropriate RF emissions safety standards that apply to cell sites, and local attempts at such regulation are disallowed and preempted under federal law.

None of the Southern California wildfires that Foster lists in her letter have any connection to the type of facility proposed for installation at 350 Amber Drive. As explained in fire expert Oldag's declaration, each of those fires involved telecommunications lines installed on wooden utility poles in close proximity to 12,000-volt above-ground electrical distribution lines, and the coming together of those lines in hurricane force winds, causing sparks to fall into dry grass below, in extremely hot, dry, and windy weather conditions. Moreover, the CPUC's reports regarding these fires demonstrate telecommunication facilities were not the source of these

[1] https://www.linkedin.com/in/susan-foster-5b2a5039
[2] https://childrenshealthdefense.org/authors/susan-foster
[3] *Id.*
[4] https://mediabiasfactcheck.com/childrens-health-defense/

fires.[5] There are no similarities between the conditions and equipment in those wildfires and the steel wireless communications tower proposed in the subject application. The proposed tower will support cell antennas 104 feet above the ground; there are no electrical distribution lines on the proposed tower, or anywhere near it. (see Exhibit E, Declaration of expert fire investigator Oldag)

Moreover, according to the Wireless Infrastructure Association, there were 142,100 cell towers (defined as free-standing structures over 50 feet in height) in the United States as of 2022. A review of reported fire incidents involving cell towers reveals that they are a rare occurrence. Foster cites only one tower fire, on a light pole on a high school football field in Chula Vista, in which an AT&T investigation concluded the wiring connecting the field lights and/or a rodent infestation (and not any associated cell site equipment) were the most likely causes. Merely because there were wireless facilities on the pole that burned and fell does not mean that cell facilities create any independent risk of fire, and no investigation of the fire in Chula Vista has alleged as such.

IV. The Project Would Not Impact the Health of the Trees Adjacent to, or in the Vicinity of the Project Site.

DHCA alleges the Project would disrupt the tree root systems of the surrounding eucalyptus and the "'mixed exotic oak forest' and 'blue gum forest' present at the Project site and its vicinity." As discussed in the Arborist Report (Exhibit F), Certified Arborist Roy Leggitt conducted a site visit on January 20, 2026, to inspect trees adjacent to, and in the vicinity of, the Project site. Only one tree, 25 feet from the Project site, is close enough to be potentially impacted by construction. The structural roots of that tree would be close to the trunk, however, and ultimately would not be impacted. With regard to the remainder of the root system, Certified Arborist Leggitt opined:

> Given the limited development of a root zone beneath pavement, it is likely that 2 to 3 percent of the root zone could be affected. This is a negligible amount of root loss and does not pose any threat to the tree.

The "mixed exotic species" in the adjacent park would not be affected by construction. Further, because the Project site is located within a gap in the tree canopies and would have a flat, non-flammable asphalt surface, there would be no tree-related fire risk associated with the vegetation at the site.

[5] Malibu Canyon Fire, see CPUC Draft Report on Settlement (9/13/2012); Woolsey Fire, see CPUC Woolsey Fire Investigation Report (10/21/2021); Guejito Fire, see CPUC Guejito Fire Report (9/2/2008).

Contrary to DHCA's speculative assertions, which are not supported with any substantial evidence, Certified Arborist Leggitt has provided his expert opinion that the Project poses no threat to the trees adjacent to, or in the vicinity of, the Project site.

V. The Project Would Not Visually Affect the St. Nicholas Antiochian Orthodox Church

DHCA alleges the Project would impact the St. Nicholas Antiochian Orthodox Church (Church) as a historical resource. As explained in the City Planning Department's December 8, 2025, Memo, the "Church has not been identified as a potential historic resource and there are no identified historical resources in the project's vicinity." Regardless, AT&T has provided additional photosimulations from public vantage points surrounding the Church. As shown in Exhibit G, the Project would not be visible when looking at the Church from Diamond Heights Boulevard or Duncan Street (Shot Points 5 and 7). The Project would be visible from the Church parking lot but would not be a dominant visual feature (Shot Point 6). The Project would have no discernable visual effect on the Church.

VI. The DHCA January 30th Submittal Misinterprets the Standards Applicable Under the Federal Telecommunications Act.

The DHCA January 30th Submittal (Section III, pg. 5-14) rehashes the same erroneous arguments originally raised in DHCA's "Memorandum in Opposition" submitted for the Planning Commission's September 25, 2025 hearing.[6] Specifically, DHCA disputes the standards for effective prohibition and what type of evidence is appropriate for to prove (1) the existence of a coverage gap; and (2) the absence of a less intrusive alternative site for the project. AT&T addressed DHCA's misinterpretation of the law of material inhibition and effective prohibition in the AT&T December 3rd CUA Rebuttal (Sections K.4 and K.6, pg. 15-21).

DHCA misinterprets the law by arguing that the "least intrusive means" test applied by most federal courts, including the Ninth Circuit, to analyze whether an unlawful effective prohibition has occurred, "has gradually been replaced by a different legal standard that turns on whether a regulation 'materially inhibits' wireless coverage." (DHCA January 30th Submittal, pg. 6). DHCA misunderstands the law. A municipality "effectively prohibits" wireless services

[6] In its January 30th Submittal, DHCA appears confused as to why AT&T addressed federal issues in its CUA Rebuttal. Every DHCA submittal has purported to "fully incorporate[] by reference all the comments and concerns raised to date on the Project or its environmental CEQA clearance." As explained in the AT&T December 3rd CUA Rebuttal, AT&T addressed federal issues because they were raised in the "Memorandum in Opposition" submitted for the Planning Commission's September 25, 2025 hearing. Daniel Schereck, the DHCA Board President, signed onto this Memorandum, along with at least 20 other individuals who signed the CUA appeal petition.

whenever a land use decision "materially inhibits" those services.[7] The Ninth Circuit instructs that the least intrusive means test "is consistent with the FCC's" material inhibition test.[8] The two-part effective prohibition test remains the law in the Ninth Circuit. *See, e.g., New Cingular Wireless, PCS, LLC v. Kootenai Cnty.*, 2025 U.S. Dist. LEXIS 31713, *34-35 ("the effective prohibition analysis is a two-part test, asking first whether there is a gap in coverage and, second, whether the absence of feasible alternatives to the proposed tower means that denial of an application effectively prohibits all wireless service in the area." (citations) (D. Id. 2025; *Kootenai Cnty.*)).[9]

DHCA next questions the existence of AT&T's coverage gap and argues the coverage maps AT&T provided are "unsubstantiated," because, even though AT&T's consultant completed independent drive test results to affirm the coverage gap in AT&T's RF maps, DHCA now wants the "raw drive test data," to prove the existence of the gap. Though not required for this application, AT&T is willing to make the "raw drive test data" available to the Board upon request. "Coverage Maps and Drive Test Maps provide a reliable method to evaluate whether there is a significant gap in coverage [and are] commonly used by radiofrequency engineers and the wireless industry."[10] AT&T has proven its significant coverage gap in the Diamond Heights area based on substantial evidence in the form of Court-approved RF maps supported by drive test data.

In-building coverage is the appropriate standard by which to measure a carrier's gap in coverage. (*See* AT&T December 3rd CUA Rebuttal, pg. 20, n. 56.) Courts have found that "[c]onsumers and carriers have an expectation and a need for reliable in-building wireless service," and the "absence of [reliable in-building service, e.g.,] constitutes a significant gap in coverage."[11] Likewise, courts have found that an absence of reliable in-vehicle service constitutes

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[7] *See In the Matter of California Payphone Assoc. Petition for Preemption, Etc.*, Opinion and Order, 12 FCC Rcd. 14191 (FCC rel. July 17, 1997); *Sprint Telephony PCS, L.P, v. Cnty. of San Diego*, 543 F.3d 571, 578 (9th Cir. 2008) (*Sprint Telephony PCS, L.P.*).

[8] *Sprint Telephony PCS, L.P,*, 543 F.3d at 578.

[9] The test for effective prohibition has been the same since 2005, when the Ninth Circuit adopted the least intrusive means test in *MetroPCS, Inc. v. City & Cnty. of San Francisco*, 400 F.3d 715, 734-35 (9th Cir. 2005; *MetroPCS, Inc.*). *See, e.g., Kootenai Cnty.,* 2025 U.S. Dist. LEXIS 31713, *34-35; *New Cingular Wireless PCS, LLC v. County of Ventura*, 2022 U.S. Dist. LEXIS 53923 (C.D. Cal. Feb. 22, 2022); *L.A. SMSA Ltd. P'ship v. City of L.A.,* 2021 U.S. Dist. LEXIS 160046, *9 (C.D. Cal. Aug. 24, 2021; *City of L.A.*); *T-Mobile West Corp. v. City of Huntington Beach*, 2012 U.S. Dist. LEXIS 148170, *12 (C.D. Cal. Oct. 10, 2012; *Huntington Beach*); *T-Mobile USA, Inc. v. City of Anacortes*, 572 F.3d 987, 995-98 (9th Cir. 2009) (*Anacortes*).

[10] *Huntington Beach,* 2012 U.S. Dist. LEXIS 148170, *26.

[11] *Huntington Beach*, 2012 U.S. Dist. LEXIS 148170, *12; *Accord, City of L.A.,* 2021 U.S. Dist. LEXIS 160046, *9 ("Inadequate or unreliable in-building service can be sufficient to show the existence of a significant gap in coverage").

a significant gap.[12] Applicable law also does not support DHCA's argument that AT&T needs to show "no service at all" or a "state of total absence" of coverage to prove a coverage gap.[13] AT&T has met its burden for proving a significant service coverage in this instance.

DHCA next argues that AT&T "cannot establish that the proposed Project would be the 'less intrusive means' [sic] to provide wireless service coverage" in the area. (DHCA January 30th Submittal, pg. 8). Because AT&T has established its coverage gap, demonstrated its efforts at locating an available and feasible location, including providing the City with a meaningful comparison of alternatives, and explained that the selected site and design are the least intrusive means for closing the gap, the burden now shifts to the City (if it were inclined to deny the application) to show that a specific alternative site is (a) available, (b) technologically feasible, and (c) less intrusive than AT&T's proposed solution.[14] Were the City to make such a showing, AT&T would then have the opportunity to rebut the availability and feasibility of any identified alternatives.[15] Since this is not the case, AT&T has fulfilled all the necessary requirements and the process has been completed.

DHCA lists things it claims AT&T should have looked for in an alternative site, criticizes AT&T's analysis of alternative sites, and asserts AT&T should have considered constructing a distributed antenna system (DAS) instead of the proposed macro facility. But AT&T's analysis of alternatives – including unavailability of properties due to disinterested owners and infeasible locations – is precisely the analysis required by the Ninth Circuit.[16] Nor is DHCA's argument sufficient to rebut AT&T's evidence, or to prove the existence of a less-intrusive alternative. As a 2025 District Court opinion explained:

> Because AT&T made a prima facie showing, the burden of proof shifts to the County to show there are available alternative sites. The County, however, offers no evidence of other alternatives; instead it offers only speculative, nonspecific suggestions regarding where AT&T might have looked for potential alternatives. Although the County is "not compelled to accept"

[12] *Huntington Beach*, at *15-16; *City of L.A.,* at *25 (courts consider "gaps on commuters and highway traffic in determining their significance").
[13] *MetroPCS, Inc.*, 400 F.3d at 730-35 (In adopting the least intrusive means test, Ninth Circuit explicitly rejected a rule that would require proof of a 'general ban' on wireless services to prove an unlawful effective prohibition).
[14] *Anacortes*, 572 F.3d at 998-99.
[15] *Id*.; *see, e.g., Kootenai Cnty.,* 2025 U.S. Dist. LEXIS 31713, *39.
[16] *See Anacortes*, 572 F.3d at 996-98.

> AT&T's representations, if it rejects them, 'it must show that there are some potentially available and technologically feasible alternatives.'" [17]

And the City would not meet its reciprocal burden under *Anacortes* by dictating a different technology such as DAS.[18] DHCA has not identified even one potentially available and feasible alternative site that would close the AT&T coverage gap.

Finally, DHCA asks the Board to grant its appeal based on "negative aesthetic impacts." (DHCA January 30th Submittal, pg. 12). But such a result based on DHCA's arguments would also be counter to the law. Statements suggesting a negative aesthetic of the proposed tower amount to generalized complaints that do not qualify as substantial evidence that could support denial of AT&T's application. Courts in the Ninth Circuit and across the country agree that such generalized aesthetic concerns do not qualify as substantial evidence in wireless siting determinations.[19]

VII. Conclusion

As discussed in AT&T's filings and this supplemental submittal, DHCA's appeal does not raise substantial evidence that supports a fact-based reason to reverse the Planning Commission's application of the Class 3 CEQA Exemption or its approval of AT&T's CUA. AT&T has provided substantial evidence in the form of expert opinions to support the findings that the Project: (1) will not affect slope stability or upset the fill settlement/compression, (2) does not represent a fire hazard and will enhance public safety, (3) will not affect the health of trees adjacent to or in the vicinity of the Project site, and (4) will not visually affect the St. Nicholas Antiochian Orthodox Church. The Project meets all applicable health and safety standards, is designed to not cause visual impacts, and will provide vastly improved service for wireless

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[17] *See Kootenai Cnty.,* 2025 U.S. Dist. LEXIS 31713, *39 *(citing Cnty. of Ventura, California*, 2022 U.S. Dist. LEXIS 53923 at *3 (*quoting Anacortes*, 572 F.3d at 998)); *See also Cnty. of Ventura,* 2022 U.S. Dist. LEXIS 53923, at *16 (least intrusive analysis does not require "elimination of every theoretical possible alternative") (citation omitted).

[18] A DAS would require a central office and construction of an integrated system of numerous nodes. Not only does DHCA fail to explain where these facilities could be placed (availability) or whether they could address AT&T's significant coverage gap (feasibility), the City is preempted from dictating the technology a wireless provider uses to build its network. *See e.g*., *New York SMSA L.P. v. Town of Clarkstown*, 612 F.3d 97, 105-106 (2d Cir. 2010) (rejecting town's preference for DAS, court held local governments are preempted from regulating technical and operational aspects of wireless telecommunications technology; *In the Matter of Public Utility Comm'n of Texas Petition for Declaratory Ruling and/or Preemption of Certain Provisions of Texas Public Utility Regulatory Act of 1995*, FCC 97-346, 13 FCC Rcd 3460, at ¶ 74 (FCC ruled it is unlawful for a locality to specify the "means and facilities" by which a service provider may offer services).

[19] *See, e.g., California RSA No. 4 v. Madera Cnty* (E.D. Cal. 2003) 332 F.Supp.2d 1291, 1308-09 ("generalized expressions of concern regarding aesthetics or the effect on property values" fail to meet the substantial evidence threshold under the Act), citing *Omnipoint Corp. v. Zoning Hearing Bd*., 181 F.3d 403, 409 (3d Cir.1999); *Cellular Telephone Co. v. Town of Oyster Bay*, 166 F.3d 490 (2nd Cir. 1999).

customers, public safety organizations, and first responders. AT&T has established its coverage gap, demonstrated its efforts at locating a feasible location, and stated that the selected site and design are the least intrusive means for closing the gap. DHCA has provided no substantial evidence to support its arguments on appeal. AT&T requests the Board deny the appeal and uphold the Project's Class 3 CEQA Exemption and CUA Approval.

Exhibits:

A. Geotechnical Investigation Summary dated February 2, 2026, Geist Engineering and Environmental Group
B. Geotechnical Engineering Investigation dated January 19, 2026, Salem Engineering Group, Inc.
C. Structural Drawings dated January 28, 2026, Vector Engineers
D. Structural Calculations dated January 28, 2026, Vector Engineers
E. Declaration of Thomas W. Oldag, retired fire investigator
F. Arborist Report dated January 28, 2026, Tree Management Experts
G. Photosimulations in relation to the St. Nicholas Antiochian Orthodox Church

Exhibit A

Exhibit A

February 2, 2026

Next Edge Networks (Next Edge)
(Northern CA Sacramento and San Francisco offices)
1355 Windward Concourse, Suite 410
Alpharetta, GA 30005

RE: Updated* Geotechnical Investigation - Proposed 104-ft Concealed Monopole
AT&T ID: CCL05330 / SF Police Academy
AT&T address: 350 Amber Dr, San Francisco, San Francisco County, CA
GE²G Project # 311965

Dear Next Edge,

Geist Engineering and Environmental Group, Inc. (GE²G), appreciates the opportunity have assisted Next Edge by having one geotechnical assessment and findings report completed for the proposed above listed proposed AT&T Mobility, LLC undertaking. Northern California Underground Service Alert (USA # 2025122300287) was completed prior to the field drilling activities. A drilling permit was obtained from the City of San Francisco. Third party utility clearance was also completed at the request of the City of San Francisco Police Department.

*Updated report statements/conclusions: Section 9.7, Section 10.3.5, Section table 10.6.1, and Section 10.10.1.

Executive Summary:
Based on a review of the previous geotechnical report completed in 1999 and summary of previous geotechnical reports included within it, documented distress to the existing Site Parcel building has been attributed to settlement of the underlying fill soils and was not caused by slope instability.

Based on the Salem Engineering Group, Inc. (Salem) observations of the exterior surficial conditions and exterior of the existing building, no visible evidence of previous slope movement/landslides was noted during the Salem November 2025 site observations conducted by an Engineering Geologist. There are no known landslides located at the site, nor is the site in the path of any known or potential landslides.

The monopole tower is planned to be located near the southern edge of an existing paved area, near the top of an existing slope. The top of the slope is approximately 250 feet east (measured horizontally) of the western property line. Based on review of available topographic information, the existing slope is estimated to have a repose of approximately 5 horizontal (H) to 1 vertical (V). The lease site area is relatively flat and

level and is located approximately 10 to 12 feet horizontally from the top of the existing slope.

The exploration test geotechnical boring B-1 was drilled on December 29 and 30, 2025 to a depth of 86.5 feet below site grade. Free groundwater was not encountered in B-1 prior to its abandonment.

In general, the materials encountered during drilling included fill soils, comprised predominately of medium dense clayey sand with trace to moderate amounts of gravel fragments throughout the depths explored. The fill soils are conservatively estimated to extend to depths around 85 feet BSG with weathered formational rock material, encountered between 85 feet and the maximum depth explored of 86.5 feet BSG.

It is anticipated that the monopole tower will be supported on cast-in-drilled-hole (CIDH) pile foundations. From a geotechnical perspective, provided the recommendations included in the Salem report are followed, the proposed tower construction is not anticipated to have a negatively impact on existing site improvements. Construction of the proposed tower improvements would not be anticipated to increase surface water drainage over or into the existing western slope area. Also, the tower construction would not result in a potential for increased saturation of the fills. Therefore, construction of the project would not result in an increased risk for slope instability or an increase the potential for future compression/settlement of the existing fills that could negatively impact the site and surrounding development.

Based on mapping and historical seismicity, the project area is located in an area high seismic activity. The site is not within a currently established State of California Earthquake Fault Zone for surface fault rupture hazards nor within an Alquist-Priolo Earthquake Fault (Special Studies) Zone, therefore, a site-specific fault study investigation by an Engineering Geologist is not required. No active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design the life of the proposed development is considered low.

Based on review of the CGS Earthquake Zones of Required Investigation maps, the subject site is not located within a mapped liquefaction hazard zone. Based on the clayey nature of the materials encountered and lack of shallow groundwater, liquefaction/seismically induced settlements is not a concerned for the proposed construction.

Specific geotechnical, site preparation, structural fill, and other recommendations for the improvement project are presented in the attached report. It is recommended that the foundation designs for the tower be provided to Salem for review. A pile foundation with

the listed minimum foundation depths should be designed by the project Structural Engineer based on design loads and maximum lateral forces expected at site.

If you have any inquiries or would like any additional information, please contact me at (510) 610-1453, or sgeist@geistenvironmental.com.

Sincerely,

Stephen Geist, President,
Geist Engineering and Environmental Group, Inc.

Attached:
Completed Geotechnical Engineering Investigation Report by Salem Engineering Group, Inc. for AT&T: CCL05330 SF Police Academy, 350 Amber Dr, San Francisco, San Francisco County, California with recommendations as competed by Dean B. Ledgerwood II, PE 94395/ PG 8725 / CEG 2613 Geotechnical Manager dated January 19, 2026 (Updated report statements/conclusions: Section 9.7, Section 10.3.5, Section table 10.6.1, and Section 10.10.1.)

Reference:
Preliminary Geological Review for Landslide Susceptibility Review by Salem Engineering Group, Inc. for AT&T: CCL05350, with recommendations as competed by Dean B. Ledgerwood II, Professional Engineer (PE) 94395/ Professional Geologist (PG) 8725 / Certified Engineering Geologists (CEG) 2613 Geotechnical Manager dated November 24, 2025

Exhibit B

Exhibit B

GEOTECHNICAL • ENVIRONMENTAL • GEOLOGY • MATERIALS TESTING & INSPECTION • FORENSIC • LABORATORY

SALEM
engineering group, inc.

GEOTECHNICAL ENGINEERING INVESTIGATION

PROPOSED AT&T 104' MONOPOLE
SITE ID: CCL05530
SAN FRANCISCO POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA

SALEM PROJECT NO. 5-225-1076
JANUARY 19, 2026

PREPARED FOR:

MR. STEPHEN T. GEIST
GEIST ENGINEERING & ENVIORMNETAL GROUP, INC.
4200 PARK BOULEVARD #149
OAKLAND, CALIFORNIA 94602

PREPARED BY:

SALEM ENGINEERING GROUP, INC.
4729 W. JACQUELYN AVENUE
FRESNO, CA 93722
P: (559) 271-9700
F: (559) 275-0827

SALEM
engineering group, inc.

4729 W. Jacquelyn Avenue
Fresno, CA 93722
Phone (559) 271-9700
Fax (559) 275-0827

January 19, 2026 Project No. 5-225-1076

Mr. Stephen T. Geist
Geist Engineering & Environmental Group, Inc.
4200 Park Boulevard #149
Oakland, California

SUBJECT: GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED AT&T 104' MONOPOLE
SITE ID: CCL05350
SAN FRANCISCO POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA

Dear Mr. Geist:

At your request and authorization, SALEM Engineering Group, Inc. (SALEM) has prepared this geotechnical engineering investigation report for the Proposed AT&T 104' Monopole planned at the San Francisco Police Academy site, located at 350 Amber Drive in San Francisco, California.

The accompanying report presents our findings, conclusions, and recommendations regarding the geotechnical aspects of designing and constructing the project as presently proposed. In our opinion, the proposed project is feasible from a geotechnical viewpoint, provided our recommendations are incorporated into the design and construction of the project.

We appreciate the opportunity to assist you with this project. Should you have questions regarding this report or need additional information, please contact the undersigned at (559) 271-9700.

Respectfully Submitted,

Dean B. Ledgerwood II, PE, PG, CEG
Geotechnical Manger
PE 94395/ PG 8725 / CEG 2613

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SALEM engineering group, inc.

4729 W. Jacquelyn Avenue
Fresno, CA 93722
Phone (559) 271-9700
Fax (559) 275-0827

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED AT&T 104' MONOPOLE
SITE ID: CCL05350
SAN FRANCISCO POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA

1. PURPOSE AND SCOPE

This report presents the results of our geotechnical engineering investigation for the proposed 104' monopole planned at the San Francisco Police Academy located at 350 Amber Drive in San Francisco, California (see Figure 1, Vicinity Map).

The purpose of our geotechnical engineering investigation was to observe and sample the subsurface conditions encountered at the site, and provide conclusions and recommendations relative to the geotechnical aspects of constructing the project as presently proposed.

The scope of this investigation included a field exploration, laboratory testing, engineering analysis and the preparation of this report. The recommendations presented herein are based on analysis of the data obtained during the investigation and our experience with similar soil and geologic conditions.

If project details vary significantly from those described herein, SALEM should be contacted to determine the necessity for review and possible revision of this report. Earthwork and Pavement Specifications are presented in Appendix C. If text of the report conflict with the specifications in Appendix C, the recommendations in the text of the report have precedence.

2. SITE LOCATION AND DESCRIPTION

The project site is located within the western limits of the developed paved portion of the San Francisco Police Academy at 350 Amber Drive in San Francisco, California. The immediate area of the proposed tower is occupied by asphaltic concrete pavements. The tower location is planned to be about 10 to 12 feet from the crown of an existing graded 5H to 1V descending slope. The slope was noted to be heavily vegetated. It is our understanding that the slope and site was graded in the early to mid 1960s (See Section 3.0 Site History).

The overall site includes an existing two story building, with an approximate plan view area of about 28,000 square feet, occupying the central portion of the property. The building construction appeared to include concrete masonry unit (CMU) wall construction with concrete pilasters supporting roof loads. The exterior walls of the existing building appeared to be in good condition. No cracking of the CMU walls, concrete columns, or concrete stem walls was noted during our site reconnaissance. During our site reconnaissance, Mr. Joel Hornstein (SFPD) indicated that he had no knowledge of any previous distress to the building during the past approximately 20 years that he has been working at the site. However, it should be noted Mr. Hornstein mentioned the interior floor in his office did not appear to be level. Mr.

Hornstein's comment regarding the floor surface appearing out of level corresponds with our understanding of the historic performance of the building summarized in the 1999 report. Our site reconnaissance and this study did not include review of the interior of the building.

The areas surrounding the building included asphaltic concrete pavements, with a parking canopy located east of the building. The pavements were noted to be in poor condition with potholes, alligator cracking, and raveling noted throughout. It is our understanding that no pavement repairs or rehabilitation activities have been performed over at least the past 20 years. The pavement condition was considered appropriate considering the age of the pavements. An existing transformer pad with CMU wall enclosure was noted at the top of the slope, east of the existing building. An asphaltic concrete curb was noted at the western edge of the pavements, at the top of a graded southwest facing slope. SALEM did not observe any signs of distress to the curbline or equipment enclosure.

3. SITE HISTORY

Based on review of available historical aerial imagery from UC Santa Barbara Historical Aerial Imagery Library (https://www.library.ucsb.edu/geospatial/aerial-photography) the surrounding area including the subject site was graded and surrounding area was developed during the early to mid-1960s. Aerial imagery dated July 29, 1946 depicts the area of the SFPD parcel as generally open land, and appears to gently slope to the west/southwesterly direction. Aerial imagery, dated July 10, 1963, indicates large mass grading was occurring on the property, including at and around the proposed tower location. An aerial image, dated May 11, 1965, depicts the tower site and overall building areas of the site as relatively flat. The existing church, located northwest of the site, had been constructed (not previously depicted in the 1963 image). Slope terraces descending to the southwest were noted. A 1993 aerial image published on Google Earth, depicts the tower site and subject property in similar condition to the present day condition.

A previous Geotechnical Investigation Report, prepared by Trans Pacific Geotechnical Consultants, Inc., dated January 18, 1999 was provided to SALEM for review. The previous report was noted to be un-signed and marked Draft. The previous report had been prepared to address proposed remodeling and seismic upgrades to the San Francisco Police Academy building. Based on review of the previous report, the 1999 report indicated that previous geotechnical investigations by Woodward Clyde Sherard and Associates were prepared for the original Diamond Heights Elementary School (January 29, 1965), a second report addressing conditions of walls and floor slab (March 21, 1969), and a third report addressing settlement in the south wing of Diamond Heights Elementary School (June 7, 1976). In addition, the 1999 report included review of a July 15, 1977 report by Harding Lawson Associates addressing additional movements to the Diamond Heights Elementary School building. These reports have not been made available to SALEM to review at this time. According to the 1999 report, previous reports summarize a history of settlement that occurred to the existing building. The Woodward Clyde Sherard (WCS) reports were reported to summarize settlement of the existing building at rate of about 1.5 inches per year. The WCS reports documented 8 inches of vertical deformation at the south end of the building, and horizontal deformation of fill at Christopher Park (downslope of the SFPD site) of about 1 inch. Reportedly, the WCS reports concluded "*that the entire mass of fill placed to develop Crhistopher Park and the school property was moving along the original ravine slopes*". The Harding Lawson Associates (HLA) report prepared in 1977 included an independent investigation of the movements of the building. According to the 1999 report, the HLA report summarized several theories of possible movement, including noting that there as a documented 6 year period between 1967 and 1973 where no settlement occurred. It was summarized that the HLA report had correlated the settlement occurred

following periods of higher than normal rainfall. The HLA report also reportedly summarized that the existing fill soils had compaction results ranging between 86 and 98 percent (averaging 92 percent). The HLA report indicated the predicted settlement rate would be around 1.5 to 2 inches per year and a total of 11 inches of settlement within the 2 story wing of the building was measured as of 1977. The 1999 report reported that HLA concluded ""*The site is stable against a large scale landslide and continue to be used safely for a school", however the two story wing was considered to be potentially unsafe during an earthquake and should not be reoccupied*."

According to the 1999 report, "*On March 13, 1979 Harding Lawson Associates issued a final report addressing the settlement monitoring on the site. There was slight lateral movement of the fill but no indications to suggest a potential landslide. Settlement was still occurring within the two story wing.*"

The 1999 report included subsurface exploration extending to depths of about 31.5 feet BSG. The borings reportedly encountered medium stiff to stiff gravelly clay with rock fragments to depths of 18 to 20 feet BSG and sandy lean clay underlain by medium dense wet clayey gravel with rock fragments to 20 feet BSG. These materials were underlain by medium dense clayey gravel and sand to the maximum depths explored of 31.5 feet BSG. The test borings and subsurface soils description did not clearly distinguish between fills and native materials, however, the report later states that fills on the order of 35 to 45 feet thick may be present in the northern portion of the building and 60 to 90 feet thick in the southern portion of the building.

Based on review of the 1999 report and summary of previous reports included in the 1999 report, documented distress to the existing building has been attributed to settlement of the underlying fill soils and was not caused by slope instability.

SALEM has not been provided with any other historic documentation pertaining to the existing construction or previous reports documenting historic cases of instability within the site. A document review request was made to the City of San Franisco Record Department, however, no information had been provided at the time of this report. If available, SALEM should be provided with any available documents for relating to the history of the property and/or ground instability.

4. PROJECT DESCRIPTION

Our understanding of the project is based primarily on our cursory review of project plans provided by Geist Engineering & Environmental Group, Inc. It is our understanding that the project will include construction of a 104' Monopole planned at the San Francisco Police Academy facility (see Figure No. 1). The tower is planned to be located near the southern edge of an existing paved area, near the top of an existing slope (see Figure No.1). The top of the slope is approximately 250 feet east (measured horizontally) of the western property line. Based on review of available topographic information, the existing slope is estimated to have a repose of approximately 5 horizontal (H) to 1 vertical (V). The lease site area is relatively flat and level and is located approximately 10 to 12 feet horizontally from the top of the existing slope. It is anticipated that the monopole tower will be supported on cast-in-drilled-hole (CIDH) pile foundations. Based on our experience with tower projects, the foundation loads are expected to be light to moderate, with foundation design governed by lateral loading.

In addition, the planned construction will include foundations supporting lightly loaded equipment cabinets. At the time of this investigation, foundation loads for the proposed tower structure had not been provided for review. Based on our experience lateral loading typically governs design.

A site grading plan was not available at the time of preparation of this report. We anticipate that cuts and fills during earthwork will be minimal and limited to providing a level equipment pads and positive site drainage. In the event that changes occur in the nature or design of the project, the conclusions and recommendations contained in the report will not be considered valid unless the changes are reviewed and the conclusions of our report are modified.

The site configuration and location of proposed improvements are shown on the Site Plan, Figure 2.

5. FIELD EXPLORATION

Our field exploration consisted of a site surface reconnaissance and a subsurface exploration. The exploratory test boring was drilled on December 29 and 30, 2025, in the areas shown on the Site Plan, Figure 2. Test boring B-1 was advanced with a CME-55 truck-mounted drill rig with 8-inch hollow stem augers, to the maximum depth explored of 86.5 feet below site grade. Upon completion of drilling, the test boring was backfilled with neat cement grout.

The materials encountered in the test boring was visually classified in the field, and the log was recorded by a field engineer and stratification lines were approximated on the basis of observations made at the time of drilling. Visual classification of the materials encountered in the excavation was generally made in accordance with the Unified Soil Classification System (ASTM D2487). The excavation location can be found on the Site Plan, attached at the end of this report.

A soil classification chart and key to sampling is presented on the Unified Soil Classification Chart, in Appendix "A." The Test Boring Log is presented in Appendix "A." The Boring Log includes the soil type, color, moisture content, dry density, and the applicable Unified Soil Classification System symbol. The location of the test boring was determined by measuring from features shown on the Site Plan, provided to us. Hence, accuracy can be implied only to the degree that this method warrants.

Subsurface soil samples were obtained by driving a Modified California sampler (MCS) and a Standard Penetration Test (SPT) sampler. Penetration resistance blow counts were obtained by dropping an automated 140-pound trip hammer through a 32.5-inch free fall to drive the sampler to a maximum depth of 18 inches. The number of blows required to drive the last 12 inches is recorded as Penetration Resistance (blows/foot) on the logs of the boring. In case very high penetration resistance is encountered, the number of blows recorded may be for less than 12 inches.

Soil samples were obtained from the test boring at the depths shown on the log of boring. The MCS samples were recovered and capped at both ends to preserve the samples at their natural moisture content; SPT samples were recovered and placed in a sealed bag to preserve their natural moisture content.

6. LABORATORY TESTING

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. The laboratory-testing program was formulated with emphasis on the evaluation of natural moisture, density, gradation, consolidation potential, shear strength, expansion index, and Atterberg Limits of the materials encountered.

In addition, chemical tests were performed to evaluate the corrosivity of the soils to buried concrete and metal. Details of the laboratory test program and the results of laboratory test are summarized in Appendix

"B." This information, along with the field observations, was used to prepare the final boring log in Appendix "A."

7. SOIL AND GROUNDWATER CONDITIONS

7.1 Subsurface Conditions

The subsurface conditions encountered appear typical of those found in the geologic region of the site and our understanding of the historic site grading.

In general, the materials encountered during drilling included fill soils, comprised predominately of medium dense clayey sand with trace to moderate amounts of gravel fragments throughout the depths explored. Below 65 feet BSG, the fills were noted to be dense. At depths around 80 to 85 feet BSG, the material encountered appeared to transition to a possible weathered rock material, with more competent rock encountered at 85 feet BSG (identified by relatively high blow counts of greater than 50 blows per foot). For the purpose of this report, the fill soils are conservatively estimated to extend to depths around 85 feet BSG with weathered formational rock material (Colma Formation), encountered between 85 feet and the maximum depth explored of 86.5 feet BSG. It should be noted that isolated layers of soils with noted organic odor were noted around depths of 25, 30, 35, and 45 feet BSG.

Three (3) direct shear tests were performed on relatively undisturbed soil samples obtained during drilling. The direct shear tests conducted on samples from 10 feet, 35 feet, and 60 feet BSG resulted in internal angles of friction of 31 degrees, 40 degrees, and 43 degrees with cohesion values of 760 pounds per square foot, 387 pounds per square foot, and 260 pounds per square foot, respectively. It should be noted that additional samples at intermittent depths were attempted for direct shear testing, however, due to gravel content in the samples collected laboratory testing was not feasible.

Atterberg limits testing performed on samples collected between 5 and 55 feet BSG resulted in plasticity indexes 10, 11, 12, and 13 with liquid limits values of 31, 33, 34, and 36, respectively. The results of the samples tested indicate these soils have low plasticity characteristics.

Soil conditions described in the previous paragraphs are generalized. Therefore, the reader should consult exploratory boring logs included in Appendix A for soil type, color, moisture, consistency, and USCS classification of the materials encountered at specific locations and elevations.

7.2 Groundwater

The test boring was checked for the presence of groundwater during and after the drilling operations. Free groundwater was not encountered at the time of our investigation.

Based on review of the Seismic Zone Hazard Report for the City and County of San Francisco (SZHR 043), the site is in an area marked as bedrock and reported groundwater depths of greater than 50 feet BSG.

It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, localized pumping, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

7.3 Soil Corrosion Screening

Excessive sulfate in either the soil or native water may result in an adverse reaction between the cement in concrete and the soil. The 2019 Edition of ACI 318 (ACI 318) has established criteria for evaluation of sulfate and chloride levels and how they relate to cement reactivity with soil and/or water. A soil sample was obtained from the project site and was tested for the evaluation of the potential for concrete deterioration or steel corrosion due to attack by soil-borne soluble salts and soluble chloride. The water-soluble sulfate concentration in the saturation extract from the soil samples were detected to be 430, 183, 220, and 330 mg/kg.

ACI 318 Tables 19.3.1.1 and 19.3.2.1 outline exposure categories, classes, and concrete requirements by exposure class. ACI 318 requirements for site concrete based upon soluble sulfate are summarized in Table 7.3 below.

TABLE 7.3
WATER SOLUBLE SULFATE EXPOSURE REQUIREMENTS

Boring/Depth	Dissolved Sulfate (SO_4) in Soil, % by Weight	Exposure Severity	Exposure Class	Maximum w/cm Ratio	Minimum Concrete Compressive Strength	Cementitious Materials Type (ASTM C150)
B-1 at 10-11.5’	0.0430	Negligible	S0	N/A	2,500 psi	No Restriction
B-1 at 30-31.5	0.0183	Negligible	S0	N/A	2,500 psi	No Restriction
B-1 at 51.5-53	0.0220	Negligible	S0	N/A	2,500 psi	No Restriction
B-1 at 30-31.5	0.0330	Negligible	S0	N/A	2,500 psi	No Restriction

The water-soluble chloride concentration detected in saturation extract from the soil sample was 80, 52, 54,a d 57 mg/kg. In addition, testing performed on the same soil sample resulted in a minimum resistivity value of 1,916 ohm-centimeter. Based on the results, these soils would be considered to have a “moderately corrosive” potential to buried metal objects (per National Association of Corrosion Engineers, Corrosion Severity Ratings).

It is recommended that, at a minimum, applicable manufacturer’s recommendations for corrosion protection of buried metal pipe be closely followed. Corrosion is dependent upon a complex variety of conditions, which are beyond the Geotechnical practice. Consequently, a qualified corrosion engineer should be consulted if the owner desires more specific recommendations. It is recommended that, at a minimum, applicable manufacturer’s recommendations for corrosion protection of buried metal pipe be closely followed.

8. GEOLOGIC SETTING

The subject site is located in the San Francisco Bay Region of the Coast Range Geologic Province. The Coast Range Geologic Province borders the coast of California and generally consists of northwesterly /southeasterly trending ridges of granitic, metavolcanic, and metasedimentary rocks. Numerous northwest to southeast trending faults parallel the trend of the Coast Ranges. The Coast Ranges generally consist of

an alternating series of parallel mountains and valleys located adjacent to the Pacific Coast. San Francisco Bay is a broad shallow depression within the Coast Ranges that has been subsequently filled with sedimentary deposits.

The bedrock units that form the Coast Ranges have been disrupted by intense folding, faulting, and crushing that occurred when the range was formed by the processes of plate tectonics. During the Jurassic and Cretaceous Periods (about 150 to 80 million years ago), the Pacific Oceanic plate collided with the North American Continental plate. The colliding motion of the two plates caused portions of the Pacific Oceanic Crust and overlying marine sediments to be piled onto the North American continental plate along the West Coast of California. The resulting chaotic jumble of bedrock units scraped off onto the North American Plate is known as the "Franciscan Assemblage," and comprises a large portion of the Coast Range Province. Subsequent development of a series of northwest-trending fault zones has further contributed to the deformation of the Coast Ranges.

Based on review of Preliminary geologic map of the San Francisco South 7.5' quadrangle and part of the Hunters Point 7.5' quadrangle, San Francisco Bay area, California[1], the site is mapped in an area described as "Colma Formation (Qc)". These native materials encountered below the fill soils appear consistent with this material. In addition, the fill soils appear generally consistent with material derived from native formational materials in the region.

9. GEOLOGIC HAZARDS

9.1 Faulting and Seismicity

Based on mapping and historical seismicity, the project area is considered to be located in an area high seismic activity. The site is not within a currently established State of California Earthquake Fault Zone for surface fault rupture hazards nor within an Alquist-Priolo Earthquake Fault (Special Studies) Zone, therefore, a site-specific fault study investigation by an Engineering Geologist is not required. No active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design the life of the proposed development is considered low.

To determine the distance of known active faults within 100 miles of the site, we used the United States Geological Survey (USGS) web-based application *2008 National Seismic Hazard Maps - Fault Parameters*. Site latitude is 37.74381° North; site longitude is -122.44163° West. The ten (10) active fault closest to the site are summarized below in Table 9.1.

TABLE 9.1
REGIONAL FAULT SUMMARY

Fault Name	Distance to Site (miles)	Maximum Earthquake Magnitude, M_w
N. San Andreas;SAO+SAN+SAP+SAS	4.48	7.9
N. San Andreas;SAO+SAN	7.86	7.8
San Gregorio Connected	8.45	7.5
Hayward-Rodgers Creek;RC+HN+HS	13.55	7.3

[1] Bonilla, M.G., 1998, Preliminary geologic map of the San Francisco South 7.5' quadrangle and part of the Hunters Point 7.5' quadrangle, San Francisco Bay area, California: a digital database, U.S. Geological Survey, Open-File Report OF-98-354, 1:24,000

Monte Vista-Shannon	23.58	6.5
Hayward-Rodgers Creek;RC	23.70	7.1
Mount Diablo Thrust	23.82	6.7
Calaveras;CN+CC+CS	24.14	7.0
Point Reyes	25.53	6.9
Green Valley Connected	26.89	6.8

The faults tabulated above and numerous other faults in the region are sources of potential ground motion. However, earthquakes that might occur on other faults throughout California are also potential generators of significant ground motion and could subject the site to intense ground shaking.

9.2 Surface Fault Rupture

The site is not within a currently established State of California Earthquake Fault Zone for surface fault rupture hazards. The nearest fault to the project site is the North San Andreas fault located approximately 4.48 miles away from the site. Due to the distance from the site to the North San Andreas fault, the potential for fault rupture to occur at the site is very low.

9.3 Ground Shaking

Based on the 2025 CBC, estimated mean shear wave velocity was determined based on the standard penetration resistance (N-vales) derived from test boring B-1, projected to a depth of 100 feet BSG. The mean shear wave velocity was factored in accordance with Chapter 20 of ASCE 7-22. Estimated mean factored shear wave velocities of 1,119 ft/sec (Vs30), 861 ft/sec (VS30/1.3) and 1,455 ft/sec (VS30*1.3) were determined for the site. Based on the estimated shear wave velocities Site Class Designations of C, C/D, and D were selected for the site. Table 10.6.1 includes design seismic coefficients and spectral response parameters, based on the 2025 California Building Code (CBC) for the project foundation design.

Based on Office of Statewide Health Planning and Development (OSHPD) Seismic Design Maps, the estimated design peak ground acceleration adjusted for site class effects (PGA_M) was determined to be 0.73 g (based on both probabilistic and deterministic seismic ground motion).

While listing PGA is useful for comparison of potential effects of fault activity in a region, other considerations are important in seismic design, including frequency and duration of motion and soil conditions underlying the site.

9.4 Liquefaction

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand. A seismic hazard, which could potentially cause damage to the proposed development during seismic shaking, is the post-liquefaction settlement of the liquefied sands.

Based on review of the CGS Earthquake Zones of Required Investigation maps, the subject site is not located within a mapped liquefaction hazard zone. Based on the clayey nature of the materials encountered and lack of shallow groundwater, liquefaction/seismically induced settlements is not a concerned for the proposed construction.

9.5 Lateral Spreading

Lateral spreading is a phenomenon in which soils move laterally during seismic shaking and is often associated with liquefaction. The amount of movement depends on the soil strength, duration and intensity of seismic shaking, topography, and free face geometry. Based on the clayey nature of the soils and lack of shallow groundwater, lateral spread is not anticipated to have a negative impact to the planned development.

9.6 Landslides

There are no known landslides located at the site, nor is the site in the path of any known or potential landslides. The western portion of the subject parcel (at least 80 feet west, and downslope of the proposed tower location) is mapped by CGS and City of San Francisco as being in a potential landslide hazard zone. The area of the planned tower is not located within the mapped hazard zone. Therefore, the area of the planned lease area is not considered to be within an area mapped by local or state jurisdiction as having known potential for landslide hazards.

Based on review of the Associated of Bay Area Governments (ABAG) Hazard View Map, the area of the proposed tower lease and entire SF Police Academy parcel is within an area mapped as "flat land" designation for potential Rainfall Induced Landslides. ABAG defines "flat land" as areas unlikely to have a rainfall induced landslide event.

As summarized in the previous geotechnical report reviewed (See Section 3.0 – Site History), previous studies have concluded that slope instability is not a concern for the site. The documented settlement/movement of the existing building has been attributed by other consultants to have occurred due to vertical compression of saturated fill soils. Based on our observations of the exterior surficial conditions and exterior of the existing building, no visible evidence of previous slope movement/landslides was noted during our November 2025 site observations conducted by an Engineering Geologist.

Based on the findings of this report and review of the previous reports, no evidence of previous landslides were found during this investigation. The project will not pose a risk for increased slope instability and the potential for landslides to impact the site is considered low.

9.7 Tsunamis and Seiches

This site is not in an area mapped as in a tsunami hazard zone by California Geological Survey – Tsunami Hazard Area map. Therefore, tsunamis (seismic sea waves) are not considered a significant hazard at the site.

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. No major water-retaining structures are located immediately up gradient from the project site. Flooding from a seismically-induced seiche is considered unlikely.

10. CONCLUSIONS AND RECOMMENDATIONS

10.1 General

10.1.1 Based upon the data collected during this investigation, and from a geotechnical engineering standpoint, it is our opinion that the site is suitable for the proposed construction of improvements at the site as planned, provided the recommendations contained in this report are incorporated into the project design and construction. Conclusions and recommendations provided in this report are based on our review of applicable design literature, analysis of data obtained from our field exploration and laboratory testing program, and our understanding of the proposed development at this time.

10.1.2 From a geotechnical perspective, provided the recommendations included in this report are followed, the proposed tower construction is not anticipated to have a negatively impact on existing site improvements. Construction of the proposed tower improvements would not be anticipated to increase surface water drainage over or into the existing western slope area. Also, the tower construction would not result in a potential for increased saturation of the fills. Therefore, construction of the project would **not** result in an increased risk for slope instability or an increase the potential for future compression/settlement of the existing fills that could negatively impact the site and surrounding development.

10.1.3 The subsurface conditions encountered appear typical of those found in the geologic region of the site. In general, the materials encountered during drilling included fill soils, comprised predominately of medium dense clayey sand with trace to moderate amounts of gravel fragments throughout the depths explored. Below 65 feet BSG, the fills were noted to be dense. At depths around 80 to 85 feet BSG, the material encountered appeared to transition to a possible weathered rock material, with more competent rock encountered at 85 feet BSG (identified by relatively high blow counts of greater than 50 blows per foot). For the purpose of this report, the fill soils are conservatively estimated to extend to depths around 85 feet BSG with weathered formational rock material (Colma Formation), encountered between 85 feet and the maximum depth explored of 86.5 feet BSG. It should be noted that isolated layers of soils with noted organic odor were noted around depths of 25, 30, 35, and 45 feet BSG

10.1.4 Based on the laboratory testing results, the near surface soils are anticipated to have low expansion potential.

10.1.5 Based on the soils encountered during this exploration, CIDH piers should extend to a minimum of 50 feet BSG (5 feet below the fill soils with layers of soils with increased organic content). Provided the recommendations included in this report are followed, the proposed tower may be supported on cast-in-drilled hole pile (CIDH) foundations. Tower foundations constructed in accordance with the recommendations included in this report may be designed considering total differential static settlement of 1 inch total and ½ inch differential in 30 feet.

10.1.6 Based on the chemistry testing performed, the near surface soils have 'negligible' potential for sulfate attack on concrete and are considered to be "mildly corrosive" to buried metal objects.

10.1.7 All references to relative compaction and optimum moisture content in this report are based on ASTM D 1557 (latest edition).

10.1.8 SALEM should be retained to review the project plans as they develop further, provide engineering consultation as-needed, and perform geotechnical observation and testing services during construction.

10.2 Surface Drainage

10.2.1 Proper surface drainage is critical to the future performance of the project. Uncontrolled infiltration of irrigation excess and storm runoff into the soils can adversely affect the performance of the planned improvements. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change to important engineering properties. Proper drainage should be maintained at all times.

10.2.2 All site drainage should be collected and transferred away from improvements in non-erosive drainage devices. Drainage should not be allowed to pond anywhere on the site, and especially not against any foundations or retaining walls. Drainage should not be allowed to flow uncontrolled over any descending slope. Proposed structures with roofs should be provided with roof gutters. Discharge from downspouts, roof drains and scuppers are not permitted onto unprotected soils within five feet of any building perimeter or foundation. Planters, if located adjacent to foundations, should be sealed or properly drained to prevent moisture intrusion into the materials providing foundation support. Landscape irrigation within 5 feet of building footings and or equipment slabs should be kept to a minimum to just support vegetative life.

10.2.3 Positive site drainage should be provided away from structures, foundation, pavement, and the tops of slopes to swales or other controlled drainage structures. The lease area should be graded such that water is not allowed to pond within 15 feet of any foundation and final soil grades should slope a minimum of 2 percent away from foundations, slabs, structures, etc. Pavements should be sloped a minimum of 1 percent away from structures/foundations.

10.3 Grading

10.3.1 A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of the material. The Geotechnical Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section as well as other portions of this report.

10.3.2 A preconstruction conference should be held at the site prior to the beginning of grading operations with the owner, contractor, civil engineer and geotechnical engineer in attendance.

10.3.3 Site clearing and demolition activities shall include removal of all surface obstructions not intended to be incorporated into final site design. In addition, underground buried structures and/or utility lines encountered during demolition and construction should be properly removed and the resulting excavations backfilled with Engineered Fill. After demolition activities, it is recommended that disturbed soils be compacted as engineered fill.

10.3.4 Excavations or depressions resulting from site clearing operations, or other existing excavations or depressions, should be restored with Engineered Fill in accordance with the recommendations of this report.

10.3.5 If encountered during construction, surface vegetation consisting of grasses and other similar vegetation (if encountered at construction) should be removed by stripping to a sufficient depth to remove organic-rich topsoil. The upper 2 to 4 inches of soils containing, vegetation, roots and other objectionable organic matter encountered at the time of grading should be stripped and removed from the surface. Deeper stripping may be required in localized areas. In addition, the gravel surface material and any existing concrete and asphalt materials required to be removed shall be removed from areas of proposed improvements and stockpiled separately from excavated soil material. The stripped vegetation, asphalt and concrete materials will not be suitable for use as Engineered Fill or within 5 feet of foundations, equipment pads, or within pavement areas. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas or exported from the site.

10.3.6 Areas of proposed lightly loaded structures such as equipment shelters, equipment mat slabs, or retaining walls, should be prepared by over-excavation to the bottom of foundations or 12 inches below adjacent site grade, whichever is greater. Upon approval, the bottom of excavation should be scarified a minimum of 12 inches, moisture conditioned to at least 1 percent above optimum, and compacted to 92 percent of the maximum density. The over-excavation zone should extend horizontally a minimum of 3 feet beyond foundations.

Equipment slabs on grade should be supported on a minimum of 6 inches of Class 2 aggregate base compacted to 95 percent relative compaction over subgrade soils prepared as recommended above.

10.3.7 An integral part of satisfactory fill placement is the stability of the placed lift of soil. If placed material exhibit excessive instability as determined by a SALEM field representative, the lift will be considered unacceptable and shall be remedied prior to placement of additional fill material. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.

10.3.8 The most effective site preparation alternatives will depend on site conditions prior to grading. We should evaluate site conditions and provide supplemental recommendations immediately prior to grading, if necessary.

10.3.9 We do not anticipate groundwater or seepage to adversely affect construction if conducted during the drier months of the year (typically summer and fall). However, due to the shallow clayey soils, soil moisture conditions could be significantly different during the wet season (typically winter and spring). Grading during this time period will likely encounter wet materials resulting in possible excavation and fill placement difficulties. Project site winterization consisting of placement of aggregate base and protecting exposed soils during construction should be performed. If the construction schedule requires grading operations during the wet season, we can provide additional recommendations as conditions warrant.

10.3.10 Typical remedial measures include: discing and aerating the soil during dry weather; mixing the soil with dryer materials; removing and replacing the soil with an approved fill material or placement of crushed rocks or aggregate base material; or mixing the soil with an approved lime or cement product.

The most common remedial measure of stabilizing the bottom of the excavation due to wet soil condition is to reduce the moisture of the soil to near the optimum moisture content by having

the subgrade soils scarified and aerated or mixed with drier soils prior to compacting. However, the drying process may require an extended period of time and delay the construction operation. To expedite the stabilizing process, crushed rock may be utilized for stabilization provided this method is approved by the owner for the cost purpose.

If the use of crushed rock is considered, it is recommended that the upper soft and wet soils be replaced by 6 to 24 inches of ¾-inch to 1-inch crushed rocks. The thickness of the rock layer depends on the severity of the soil instability. The recommended 6 to 24 inches of crushed rock material will provide a stable platform. It is further recommended that lighter compaction equipment be utilized for compacting the crushed rock. All open graded crushed rock/gravel should be fully encapsulated with a geotextile fabric (such as Mirafi 140N) to minimize migration of soil particles into the voids of the crushed rock. Although it is not required, the use of geogrid (e.g. Tensar BX 1100, BX 1200 or TX 160) below the crushed rock will enhance stability and reduce the required thickness of crushed rock necessary for stabilization.

Our firm should be consulted prior to implementing remedial measures to provide appropriate recommendations.

10.4 Soil and Excavation Characteristics

10.4.1 Based on the conditions encountered in the soil boring, the surface soils can be excavated with moderate effort using conventional excavation equipment.

10.4.2 It is the responsibility of the contractor to ensure that all excavations and trenches are properly shored and maintained in accordance with applicable Occupational Safety and Health Administration (OSHA) rules and regulations to maintain safety and maintain the stability of adjacent existing improvements. Temporary excavations are further discussed in a later Section of this report.

10.4.3 The near surface soils identified as part of our investigation are generally considered damp to moist. Earthwork operations conducted during inclement periods of the year are likely to encounter moist potentially unstable soils which may require removal to a stable bottom. Exposed native soils exposed as part of site grading operations shall not be allowed to dry out and should be kept continuously moist prior to placement of subsequent fill.

10.5 Materials for Fill

10.5.1 On-site soils are considered suitable for use as engineered fill at depths of at least 4 inches below concrete slabs and directly below shallow foundations. On-site soils used as engineered fill should not contain deleterious matter, organic material, or rock material larger than 3 inches in maximum dimension.

10.5.2 Import soil intended for use as Imported Engineered Fill soil, should be well-graded, slightly cohesive silty sand or sandy silt. This material should be approved by the Engineer prior to use and should typically possess the soil characteristics summarized below in Table 10.5.2

TABLE 10.5.2
IMPORT ENGINEERED FILL REQUIREMENTS

Percent Passing 3-inch Sieve	100

Percent Passing No.4 Sieve	75-100
Percent Passing No 200 Sieve	15-40
Maximum Plasticity Index	10
Organic Content, Percent by Weight	Less than 3%
Maximum Expansion Index (ASTM D4829)	10

Prior to importing the Contractor should demonstrate to the Owner that the proposed import meets the requirements for import fill specified in this report. In addition, the material should be verified by the Contractor that the soils do not contain any environmental contaminates as regulated by local, state, or federal agencies, as applicable.

10.5.3 The preferred materials specified for Imported Engineered Fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since they have complete control of the project site.

10.5.4 Environmental characteristics and corrosion potential of import soil materials should also be considered.

10.5.5 Proposed import materials should be sampled, tested, and approved by SALEM prior to its transportation to the site.

10.5.6 On-site soils placed as Engineered Fill should be moisture conditioned to at least 1 percent above optimum moisture content, and compacted to 92 percent relative compaction (ASTM D 1557).

10.5.7 Imported Engineered Fill should be moisture conditioned to slightly above optimum moisture content, and compacted to 92 percent relative compaction (ASTM D1557).

10.5.8 All Engineered Fill should be placed in lifts no thicker than will allow for adequate bonding and compaction (typically a maximum of 6 to 8 inches in loose thickness).

10.5.9 Caltrans Class 2 Aggregate Base shall meet the minimum requirements of Section 26 of the Caltrans Standard Specifications (Current Edition). Prior to importing, the Contractor should provide documentation that the aggregate base meets the requirements for Class 2 aggregate base (i.e. gradation, durability, R-value, sand equivalent, etc.) to the Owner and Salem for review. All aggregate base should be compacted to a minimum of 95 percent relative compaction.

10.5.10 Open graded gravel and rock material (i.e. ¾ inch or ½ inch crushed gravel) should not be used as backfill including utility trenches. If required by local agency or for use in subgrade stabilization, to prevent migration of fines, open graded materials should be fully encapsulated in a geotextile fabric such as Mirafi 140N or equivalent. Open graded rock should be placed in loose lifts no greater than about 6 to 8 inches, and vibrated in-place to a firm non-yielding condition.

10.6 Seismic Design Criteria

10.6.1 For seismic design of the structures, and in accordance with the seismic provisions of the 2025 CBC, our recommended parameters are shown below. These parameters were determined from the USGS Seismic Design Geodatabase obtained via the State of California Office of Statewide Health Planning and Development (OSHPD) Seismic Design Map Tool Website (https://seismicmaps.org/) in accordance with the 2025 CBC. The Site Classes were determined based on the requirements of ASCE 7-22, Chapter 20. The Value given for each Seismic Item below is the most critical value between the given Site Classes.

TABLE 10.6.1 - 2025 CBC SEISMIC DESIGN PARAMETERS

Seismic Item	Symbol	Value	ASCE 7-22 or 2025 CBC Reference
Site Coordinates (Datum = NAD 83)		37.74381 Lat -122.44163 Lon	
Site Class	--	C/CD/D	ASCE 7-22 Table 20.2-1
Soil Profile Name(s)	--	Very Dense /Very Dense to Dense /Dense	ASCE 7-22 Table 20.2-1
Risk Category	--	III	CBC 2025 Table 1604.5
Peak Ground Acceleration (adjusted for Site Class effects)	PGA_M	0.73 g	USGS Seismic Design Geodatabase
Seismic Design Category	SDC	D	ASCE 7 Table 11.6-1 & 2
Mapped Spectral Acceleration (Short period - 0.2 sec)	S_S	1.84 g	USGS Seismic Design Geodatabase
Mapped Spectral Acceleration (1.0 sec. period)	S_1	0.70 g	USGS Seismic Design Geodatabase
MCE Spectral Response Acceleration (Short period - 0.2 sec)	S_{MS}	2.06 g	USGS Seismic Design Geodatabase
MCE Spectral Response Acceleration (1.0 sec. period)	S_{M1}	2.07 g	USGS Seismic Design Geodatabase
Design Spectral Response Acceleration $S_{DS}=⅔S_{MS}$ (short period - 0.2 sec)	S_{DS}	1.37 g	ASCE 7 Equation 11.4-1
Design Spectral Response Acceleration $S_{D1}=⅔S_{M1}$ (1.0 sec. period)	S_{D1}	1.38 g	ASCE 7 Equation 11.4-2
End of Short-Term Transition Period (S_{D1}/S_{DS}), Seconds	T_S	1.06	ASCE 7-22, Section 11.4.5
Beginning of Short-Term Transition Period (0.2[S_{D1}/S_{DS}]), Seconds	T_0	0.213	ASCE 7-22, Section 11.4.5
Long Period Transition Period (seconds)	T_L	12	ASCE 7-22, Figure 22-14

10.6.2 Conformance to the criteria in the above table for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a large earthquake occurs. The primary goal of seismic design is to protect life, not to avoid all damage, since such design may be economically prohibitive.

10.7 Cast in Drilled Hole (CIDH) Pile Foundation for Tower

10.7.1 It is recommended that the foundation designs for the tower be provided to SALEM for review. A pile foundation should be designed by the project Structural Engineer based on design loads and maximum lateral forces expected at site. This report recommends the CIDH piers extend to at least 5 feet below the fill soils with varying organic content encountered between 25 and 45 feet BSG. Therefore, this report recommends a minimum CIDH pier depth of 50 feet BSG.

10.7.2 Cast-in-drilled-hole pile foundations may be designed based on total static settlement of 1 inch and differential static settlement of ½ inch in 30 feet or between piles, whichever is less.

10.7.3 Skin friction within the upper 2 feet BSG should be neglected in design. The downward load capacity of the piers (extending to at least 50 feet BSG), may be designed based on an average allowable skin friction value of 500 pounds per square foot. **End bearing support should not be considered in design.** This value may be increased by 1/3 for short duration temporary wind and seismic loading.

10.7.4 The average allowable uplift resistance of the pier foundations may be assumed to be 300 pounds per square foot, plus the weight of the CIDH pile.

10.7.5 The passive resistance in the upper portion of the piles to a depth of 2 feet or width equal to the CIDH pier diameter, whichever is greater, should be neglected for design. In addition, the upper portion of the pile where soils are within 10 feet horizontally of the face of the descending slope should be neglected in design The allowable passive resistance of the soils below the depths described above may be assumed to be equal to the pressure developed by a fluid with a density of 275 pounds per cubic foot to a maximum of 2,750 pounds per square foot. These values may be increased by one-third for short duration wind and seismic loads. No other increases should be applied to the allowable passive pressure.

10.7.6 If desired, the cast in drilled hole piers may be designed using LPILE and the parameters presented in Table 10.7.6. The lateral loading criteria is based on the assumption that the load application is applied at the ground level, flexible cap connections applied.

TABLE 10.7.6 -LPILE PARAMETERS

Depth, BSG (Feet)	L-Pile Soil Type	Effective Unit Weight (pcf)	Angle of Internal Friction (degrees)	Static Modulus of Subgrade Reaction, K (pci)
*2-25	Sand (Reese)	130	31	90
25-45	Sand (Reese)	130	40	40
45-85	Sand (Reese)	130	43	225

*** The upper portion of the piles to a depth of 2 feet or width equal to the CIDH pier diameter, whichever is greater, should be neglected for design. In addition, the upper portion of the pile where soils are within 10 feet horizontally of the face of the descending slope should be neglected in design**

10.8 CIDH Pier Construction

10.8.1 The project structural engineer should prepare a specification for the construction of the deep foundations as part of the construction documents. The specifications should be consistent with the recommendations included in this report.

10.8.2 Concrete should be placed in the drilled shaft as soon as possible following drilling. Concrete should be placed by tremie pipe method from the bottom of the drilled shaft.

10.8.3 The Contractor should considerer the borings noted in test borings reported in this report to determine the most appropriate means and method for drill hole stabilization. If excessive sidewall collapse occurs, SALEM should be consulted to observe the conditions and determine if any mitigation measures are required prior to placement of reinforcement and concrete.

10.8.4 If Temporary Casing is required, the Temporary casing used for support of drilled pile excavations during construction should be slowly removed from the shaft excavation during placement of concrete while ensuring the casing is not raised above the level of the concrete during shaft construction. The bottom of the casing should be lifted slowly as the concrete is deposited and kept at least two feet below the top of the concrete to avoid sloughing soils from mixing with the concrete.

10.8.5 Casing (where used) should be able to withstand the external pressures of the caving soils. The outside diameter of the casing should not be less than the diameter of the cast-in-drilled hole concrete pile.

10.8.6 Drilled holes for pile foundations should be drilled within 2 degrees of vertical. The rebar cage should be suspended within 2 degrees of vertical in the center of the excavation. Minimum concrete cover, as specified by the project design engineer, should be maintained throughout the length of the excavation. These conditions should be verified and documented by Salem Engineering Group during construction.

10.8.7 Salem Engineering Group should inspect the drilling of the shafts to verify that the materials encountered are consistent with those evaluated during our geotechnical engineering investigation. **This inspection should be conducted during drilling and prior to placement of reinforcing steel and concrete.**

10.8.8 All loose materials should be removed from the drilled shaft excavations prior to placement of reinforcing steel and concrete by use of a clean-out bucket or other acceptable methods to ensure removal of all loose materials.

10.9 Lightly Loaded Shallow Conventional Foundations and Equipment Slabs

10.9.1 It is recommended that the foundation designs for ancillary structures be provided to SALEM for review.

10.9.2 The site is suitable for use of conventional shallow foundations for equipment shelters/pads structures and slab foundations for equipment, bearing in compacted engineered fill prepared in accordance with Section 10.3 of this report.

10.9.3 It is recommended that shallow conventional footings to be utilized for lightly loaded foundations such as the equipment shelter should have a minimum width of 12 inches, and a minimum

embedment depth of 12 inches below lowest adjacent pad grade. The face of shallow foundations should be at a sufficient depth to ensure a minimum setback of 5 feet horizontally from the face of descending slopes

10.9.4 Shallow foundations supported on engineered fill as recommended in this report may be designed based on an allowable bearing capacity of 1,500 pounds per square foot. This value may be increased by 1/3 for wind and seismic loading.

10.9.5 Structural mat foundations may be designed for an average allowable bearing pressure of 1,000 psf and a maximum bearing pressure of 1,500 psf. A modulus of subgrade reaction of 150 psi/inch may be used for design.

10.9.6 Total static settlement of 1 inch and differential static settlement of ½ inch in 30 feet should be anticipated for design. The footing excavations should not be allowed to dry out any time prior to pouring concrete.

10.9.7 Resistance to lateral footing displacement can be computed using an estimated allowable friction factor of 0.29 acting between the base of foundations and the supporting subgrade.

10.9.8 Lateral resistance for footings can alternatively be developed using an estimated allowable equivalent fluid passive pressure of 275 pounds per cubic foot acting against the appropriate vertical footing faces. An increase of one-third is permitted for wind and earthquake and seismic loading. The upper 6 inches should be neglected in design.

10.9.9 Minimum reinforcement for continuous footings should consist of four No. 4 steel reinforcing bars; two placed near the top of the footing and two near the bottom. Reinforcement for spread footings should be designed by the project structural engineer.

10.9.10 Underground utilities running parallel to footings should not be constructed in the zone of influence of footings. The zone of influence may be taken to be the area beneath the footing and within a 1:1 plane extending out and down from the bottom edge of the footing.

10.9.11 The foundation subgrade should be sprinkled as necessary to maintain a moist condition without significant shrinkage cracks as would be expected in any concrete placement. Prior to placing rebar reinforcement, foundation excavations should be evaluated by a representative of SALEM for appropriate support characteristics and moisture content. Moisture conditioning may be required for the materials exposed at footing bottom, particularly if foundation excavations are left open for an extended period.

10.10 Temporary Excavations

10.10.1 We anticipate that the majority of the near surface site soils will be classified as Cal-OSHA "Type C" soil when encountered in excavations during site development and construction. Excavation sloping, benching, the use of trench shields, and the placement of trench spoils should conform to the latest applicable Cal-OSHA standards. The contractor should have a Cal-OSHA-approved "competent person" onsite during excavation to evaluate trench conditions and make appropriate recommendations where necessary.

10.10.2 It is the contractor's responsibility to provide sufficient and safe excavation support as well as protecting nearby utilities, structures, and other improvements which may be damaged by earth movements. All onsite excavations must be conducted in such a manner that potential surcharges from existing structures, construction equipment, and vehicle loads are resisted. The surcharge area may be defined by a 1:1 projection down and away from the bottom of an existing foundation or vehicle load.

10.10.3 Temporary excavations and slope faces should be protected from rainfall and erosion. Surface runoff should be directed away from excavations and slopes.

10.10.4 Open, unbraced excavations in undisturbed soils should be made according to the slopes presented in the following table:

RECOMMENDED EXCAVATION SLOPES

Depth of Excavation (ft)	Slope (Horizontal : Vertical)
0-5	1:1
5-10	1½:1

10.10.5 If, due to space limitation, excavations near existing structures are performed in a vertical position, braced shorings or shields may be used for supporting vertical excavations. Therefore, in order to comply with the local and state safety regulations, a properly designed and installed shoring system would be required to accomplish planned excavations and installation. A Specialty Shoring Contractor should be responsible for the design and installation of such a shoring system during construction.

10.10.6 Braced shorings should be designed for a maximum pressure distribution of 40H, (where H is the depth of the excavation in feet). The foregoing does not include excess hydrostatic pressure or surcharge loading. Fifty percent of any surcharge load, such as construction equipment weight, should be added to the lateral load given herein. Equipment traffic should concurrently be limited to an area at least 3 feet from the shoring face or edge of the slope.

10.10.7 The excavation and shoring recommendations provided herein are based on soil characteristics derived from the boring within the area. Variations in soil conditions will likely be encountered during the excavations. SALEM Engineering Group, Inc. should be afforded the opportunity to provide field review to evaluate the actual conditions and account for field condition variations not otherwise anticipated in the preparation of this recommendation. Slope height, slope inclination, or excavation depth should in no case exceed those specified in local, state, or federal safety regulation, (e.g. OSHA) standards for excavations, 29 CFR part 1926, or Assessor's regulations.

10.11 Underground Utilities

10.11.1 Underground utility trenches should be backfilled with properly compacted material. The material excavated from the trenches should be adequate for use as general backfill above the bedding and pipe zone (see Section 14.2) provided it does not contain deleterious matter, vegetation or rock larger than 3 inches in maximum dimension. Trench backfill should be placed in loose lifts not exceeding 8 inches and compacted to at least 90 percent relative compaction to

at least 1 percent above optimum moisture content. The upper 12 inches of trench backfill within asphalt or concrete paved areas shall be moisture conditioned to at or above optimum moisture content and compacted to at least 95 percent relative compaction.

10.11.2 Bedding and pipe zone backfill typically extends from the bottom of the trench excavations to approximately 12 inches above the crown of the pipe. Pipe bedding, haunches and initial fill extending to 1 foot above the pipe should consist of a clean well graded sand with 100 percent passing the #4 sieve, a maximum of 15 percent passing the #200 sieve, and a minimum sand equivalent of 20.

10.11.3 It is suggested that underground utilities crossing beneath new or existing structures be plugged at entry and exit locations to the building or structure to prevent water migration. Trench plugs can consist of on-site clay soils, if available, or sand cement slurry. The trench plugs should extend 2 feet beyond each side of individual perimeter foundations.

10.11.4 The contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

11. PLAN REVIEW, CONSTRUCTION OBSERVATION AND TESTING

11.1 Plan and Specification Review

11.1.1 SALEM should review the project plans and specifications prior to final design submittal to assess whether our recommendations have been properly implemented and evaluate if additional analysis and/or recommendations are required.

11.2 Construction Observation and Testing Services

11.2.1 The recommendations provided in this report are based on the assumption that we will continue as Geotechnical Engineer of Record throughout the construction phase. It is important to maintain continuity of geotechnical interpretation and confirm that field conditions encountered are similar to those anticipated during design.

If we are not retained for these services, we cannot assume any responsibility for others interpretation of our recommendations, and therefore the future performance of the project.

11.2.2 SALEM should be present at the site during site preparation to observe site clearing, preparation of exposed surfaces after clearing, and placement, treatment and compaction of fill material.

11.2.3 SALEM's observations should be supplemented with periodic compaction tests to establish substantial conformance with these recommendations. Moisture content of footings and slab subgrade should be tested immediately prior to concrete placement. SALEM should observe foundation excavations prior to placement of reinforcing steel or concrete to assess whether the actual bearing conditions are compatible with the conditions anticipated during the preparation of this report.

12. LIMITATIONS AND CHANGED CONDITIONS

The analyses and recommendations submitted in this report are based upon the data obtained from the test boring drilled at the approximate locations shown on the Site Plan, Figure 2. The report does not reflect variations which may occur between borings. The nature and extent of such variations may not become evident until construction is initiated.

If variations then appear, a re-evaluation of the recommendations of this report will be necessary after performing on-site observations during the excavation period and noting the characteristics of such variations. The findings and recommendations presented in this report are valid as of the present and for the proposed construction.

If site conditions change due to natural processes or human intervention on the property or adjacent to the site, or changes occur in the nature or design of the project, or if there is a substantial time lapse between the submission of this report and the start of the work at the site, the conclusions and recommendations contained in our report will not be considered valid unless the changes are reviewed by SALEM and the conclusions of our report are modified or verified in writing.

The validity of the recommendations contained in this report is also dependent upon an adequate testing and observations program during the construction phase. Our firm assumes no responsibility for construction compliance with the design concepts or recommendations unless we have been retained to perform the on-site testing and review during construction. SALEM has prepared this report for the exclusive use of the owner and project design consultants.

SALEM does not practice in the field of corrosion engineering. It is recommended that a qualified corrosion engineer be consulted regarding protection of buried steel or ductile iron piping and conduit or, at a minimum, that manufacturer's recommendations for corrosion protection be closely followed. Further, a corrosion engineer may be needed to incorporate the necessary precautions to avoid premature corrosion of concrete slabs and foundations in direct contact with native soil. The importation of soil and or aggregate materials to the site should be screened to determine the potential for corrosion to concrete and buried metal piping.

The report has been prepared in accordance with generally accepted geotechnical engineering practices in the area. No other warranties, either express or implied, are made as to the professional advice provided under the terms of our agreement and included in this report.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (559) 271-9700.

Respectfully Submitted,

SALEM ENGINEERING GROUP, INC.





Dean B. Ledgerwood II, PE, PG, CEG
Geotechnical Manager
PE 94395 / PG 8725 / CEG 2613

R. Sammy Salem, MS, PE, GE
Principal Managing Engineer
RCE 52762 / RGE 2549





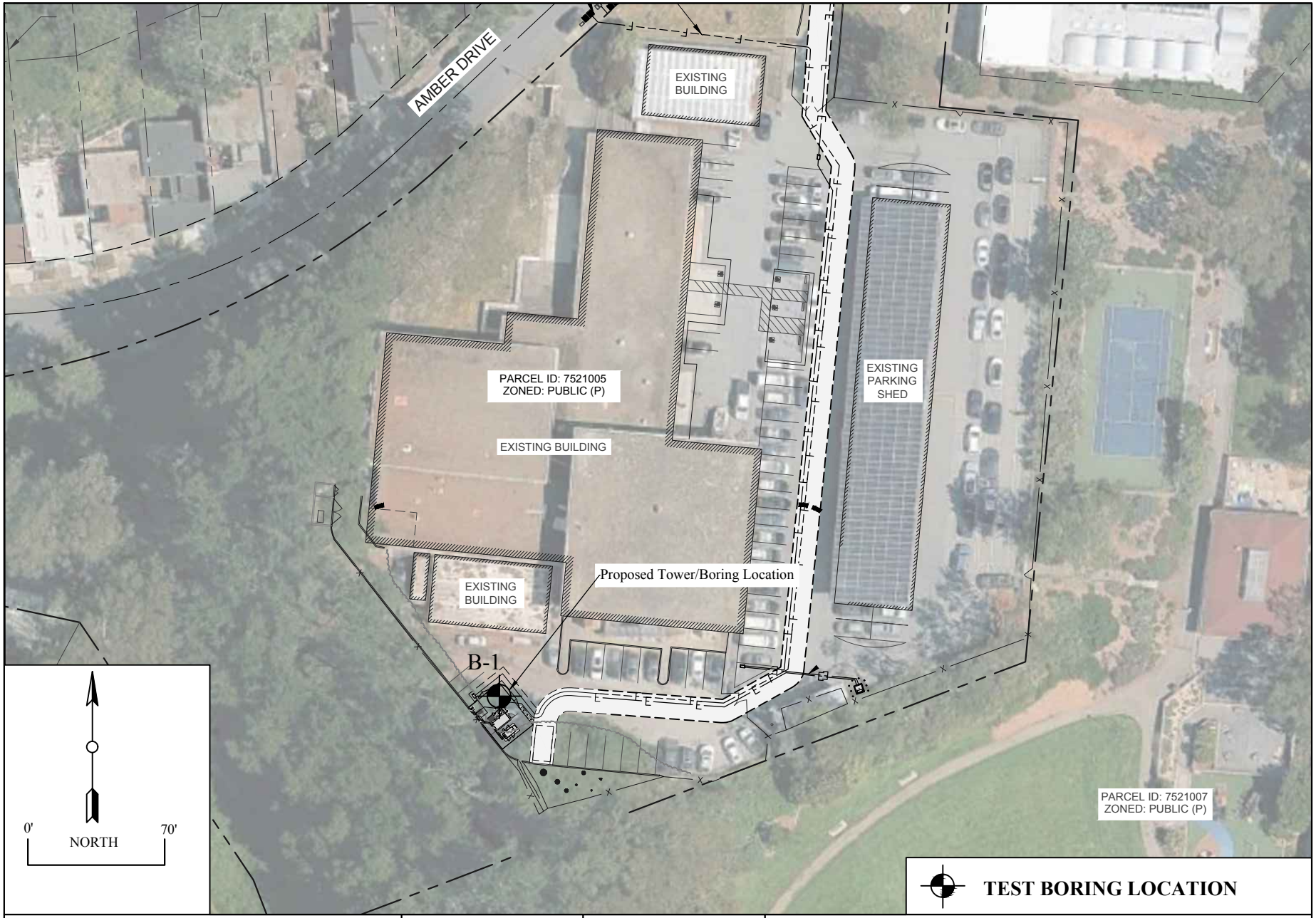
South San Francisco, CA. 2021 USGS 7.5' Topo

VICINITY MAP

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED VERIZON 103' MONOPOLE TOWER
SAN FRANCISCO POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA

SCALE: 1" = 2,000'	DATE: Dec. 2025
DRAWN BY: VT	APPROVED BY: DL
PROJECT NO. 5-225-1076	FIGURE NO. 1

SALEM engineering group, inc.



SITE PLAN	SCALE: 1" = 70'	DATE: DEC. 2025
GEOTECHNICAL ENGINEERING INVESTIGATION PROPOSED VERIZON 103' MONOPOLE TOWER SAN FRANCISCO POLICE ACADEMY 350 AMBER DRIVE SAN FRANCISCO, CALIFORNIA	DRAWN BY: CR	APPROVED BY: DL
	PROJECT NO. 5-225-1076	FIGURE NO. 3

SALEM
engineering group, inc.

APPENDIX

A

APPENDIX A
FIELD EXPLORATION

Our field exploration consisted of a site surface reconnaissance and a subsurface exploration. The exploratory boring was drilled on December 29 and 30, 2025, in the area shown on the Site Plan, Figure 2.

Sampling in the boring was accomplished using a hydraulic 140-pound hammer with a 30-inch drop. Samples were obtained with a 3-inch outside-diameter (OD), split spoon (California Modified) sampler, and a 2-inch OD, Standard Penetration Test (SPT) sampler driven 18 inches into the soil. Penetration and/or Resistance tests were performed at selected depths. The resistance/N-Value obtained from driving was recorded based on the number of blows required to penetrate the last 12 inches. The driving energy was provided by an auto-trip hammer weighing 140 pounds, falling 4inches. Relatively undisturbed MCS soil samples were obtained while performing this test. Bag samples of the disturbed soil were obtained from the SPT samples and auger cuttings. All samples were returned to our Fresno laboratory for evaluation. The test borings were backfilled with excavated soil upon completion of drilling and sampling.

Subsurface conditions encountered in the exploratory boring were visually examined, classified and logged in general accordance with the American Society for Testing and Materials (ASTM) Practice for Description and Identification of Soils (Visual-Manual Procedure D2488). This system uses the Unified Soil Classification System (USCS) for soil designations. The log depicts soil and geologic conditions encountered and depths at which samples were obtained. The log also includes our interpretation of the conditions between sampling intervals. Therefore, the log contains both observed and interpreted data. We determined the lines designating the interface between soil materials on the log using visual observations, drill rig penetration rates, excavation characteristics and other factors. The transition between materials may be abrupt or gradual. Where applicable, the field log was revised based on subsequent laboratory testing.

Test Boring: B-1 **Page** 1 **Of:** 3

Project Number: 5-225-1076

Date: 12/29/2025

Client: Geist Engineering & Enviromental Group, Inc.

Project: AT&T 103' Monopole CCL05350: SF Police Academy

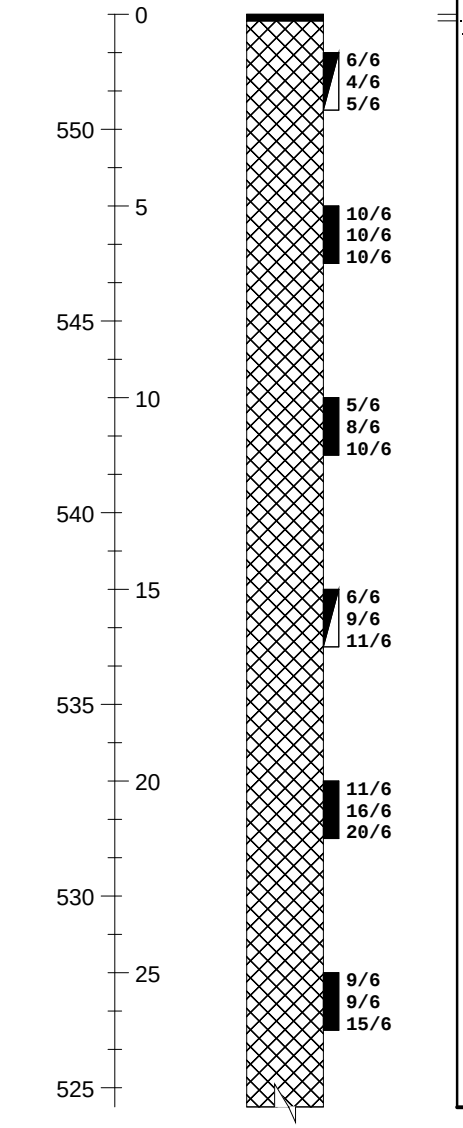
Location: 350 Amber Drive, San Francisco, CA.

Drilled By: Salem Engineering Group, Inc. **Logged By:** RS

Drill Type: CME 55 **Elevation:** 553-ft. AMSL

Auger Type: 8in. Hollow Stem Auger **Initial Depth to Groundwater:** NE

Hammer Type: Automatic Trip - 140lbs./30in. **Final Depth to Groundwater:** NE



ELEVATION/ DEPTH (feet)	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
	AC	Asphalt Concerete = 2 inches.				
	FILL	Clayey Sand; Loose, reddish brown to light brown, fine to coarse, trace gravel.	9	15.8	--	
		Dark brown. Medium dense	20	13.7	113.3	Gravel=26% Sand = 45% #200 = 29% PL = 21 LL = 31
		Light brown, increase sand.	18	13.3	115.5	ϕ = 31° C' = 760
			20	--	--	No recovery.
		dark brown, increase in percent sand.	36	9.5	120.3	
		grey with brown, very moist, slight organic smell.	24	18.1	108.6	Gravel=21% Sand = 31% #200 = 48% PL = 22 LL = 33

Notes:

Figure Number A-1

SALEM engineering group, inc.

Project Number: 5-225-1076
Date: 12/29/2025
Test Boring: B-1

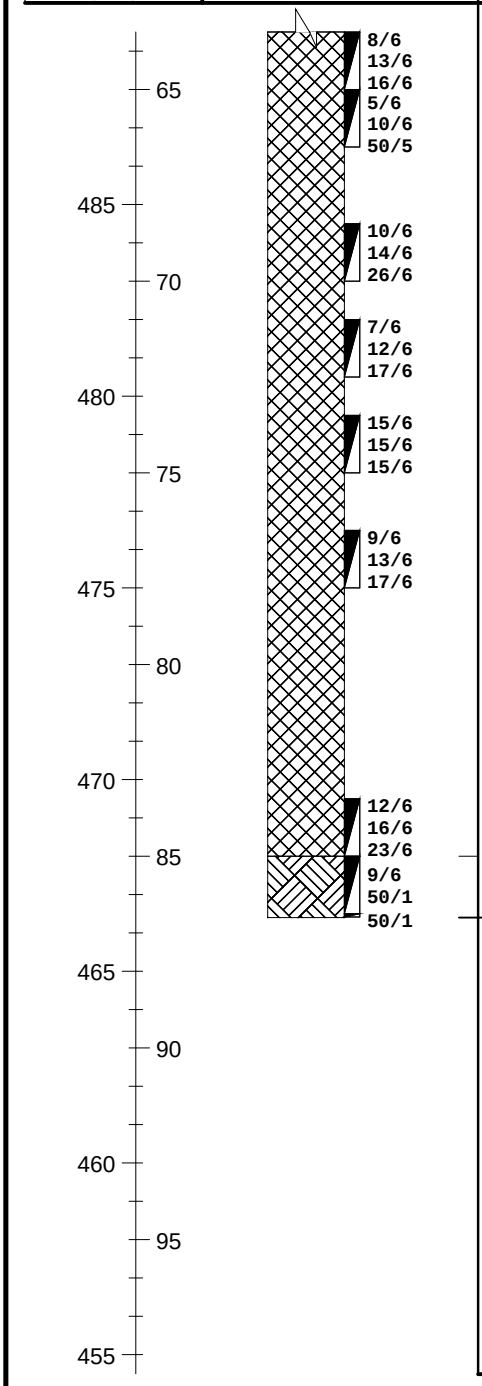
ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
30	3/6 4/6 7/6		dark brown to black, trace of roots, increase in percent fines.	11	22.9	--	
520							
35	11/6 11/6 10/6		Greyish brown, moist, no roots, no organic smell, increase gravel.	21	15.8	114.1	ϕ = 40° C' = 387
515							
40	4/6 5/6 9/6		brown with some greyish white, slightly moist.	14	24.0	--	
510							
45	7/6 8/6 7/6		Red to brown.	15	14.1	116.4	Gravel=25% Sand = 39% #200 = 36% PL = 22 LL = 34
505			brown to dark grey, some organics,				
50	13/6 16/6 19/6 7/6 9/6 12/6		light brown to brown, moist, with gravel.	35	13.8	113.5	
500			Dark grey, with sand and trace gravel.	21	13.7	--	
55	9/6 16/6 19/6 8/6 12/6 8/6		Orange,red, grey, green with brown.	35	13.3	113.5	Gravel=28% Sand = 45% #200 = 27% PL = 23 LL = 36
495			Grey with reddish brown.	20	12.3	--	
60	9/6 13/6 12/6 6/6 7/6 11/6		Dark grey, with gravel.	25	16.9	113.8	
490			Light orange brown to dark grey.	18	17.2	--	ϕ = 43° C' =260

Notes:

Figure Number A-1

SALEM engineering group, inc.

Project Number: 5-225-1076
Date: 12/29/2025
Test Boring: B-1



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
			Light brown, slightly moist.	29	10.7	--	Gravel=31% Sand = 42% #200 = 27%
			Brown, dark grey.	>50	16.3	--	
		FILL	Hard driling, weathered grey rock.		21.9	--	
			Dense, reddish light brown, Very moist	40	16.4	--	
			Light reddish dark brown, moist.	29	11.0	--	
			Dense	30	14.3	--	Gravel=29% Sand = 45% #200 = 26%
			Very gravelly, weathered rock fragments.	30	14.1	--	
			moist, reddish brown weathered rock, with clay.	39	11.8	--	
		ROCK	Weathered Rock - Very Low Recovery Appears to be Colima Formation	>50	12.3	--	
			End of boring at 86.5ft. BSG	>50	--	--	

Notes:

Figure Number A-1

KEY TO SYMBOLS

Symbol Description

Strata symbols



Asphaltic Concrete



Fill



Fractured Rock

Misc. Symbols



Boring continues

Soil Samplers



Standard penetration test



California sampler

Notes:

Granular Soils
Blows Per Foot (Uncorrected)

	MCS	SPT
Very loose	<5	<4
Loose	5-15	4-10
Medium dense	16-40	11-30
Dense	41-65	31-50
Very dense	>65	>50

Cohesive Soils
Blows Per Foot (Uncorrected)

	MCS	SPT
Very soft	<3	<2
Soft	3-5	2-4
Firm	6-10	5-8
Stiff	11-20	9-15
Very Stiff	21-40	16-30
Hard	>40	>30

MCS = Modified California Sampler
SPT = Standard Penetration Test Sampler

APPENDIX

B

APPENDIX B
LABORATORY TESTING

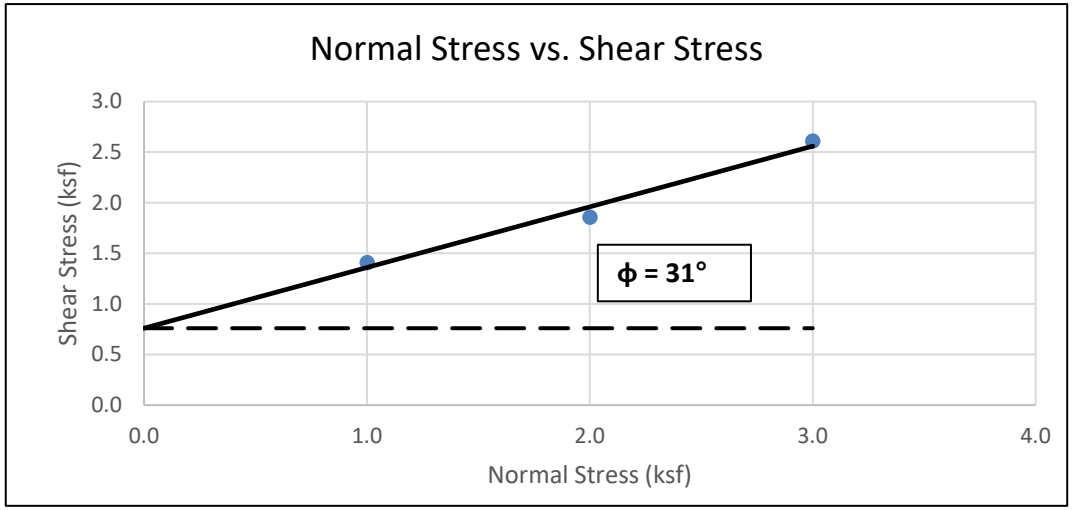
Laboratory tests were performed in accordance with generally accepted test methods of the American Society for Testing and Materials (ASTM), Caltrans, or other suggested procedures. Selected samples were tested for in-situ density and moisture content, Atterberg limits, expansion index, grain size distribution, consolidation, shear strength, corrosivity, and soil resistivity. The results of the laboratory tests are summarized in the following figures.

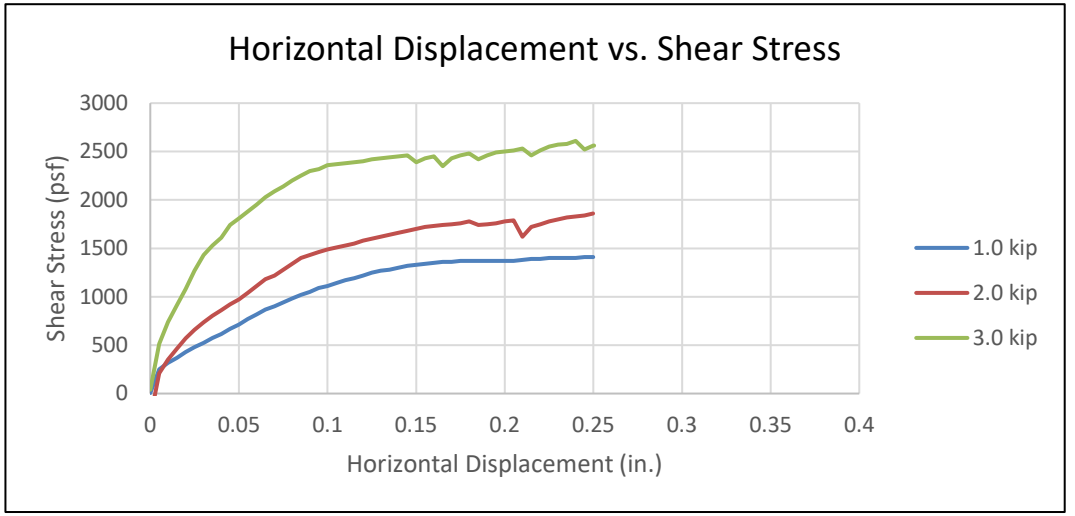
Direct Shear Test (ASTM D3080)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Client: Geist Engineering and Environmental Group, Inc.
Boring: B-1 @ 10'-11.5'
Soil Type: Clayey Sand with Grave
Sample Type: Undisturbed Ring
Tested By: NL / MC
Reviewed By:
Date of Test: 1/12-13/26
Test Equipment: GeoComp ShearTrac II

	Loading		
	1.0 kip	**2.0 kip**	**3.0 kip**
Normal Stress (ksf)	1.00	2.00	3.00
Shear Rate (in/min)	0.0040	0.0040	0.0040
Peak Shear Stress (ksf)	1.41	1.86	2.61

Initial Height of Sample (in)	1.000	1.000	1.000
Post-Consol. Sample Height (in.)	0.966	0.931	0.928
Post-Shear Sample Height (in.)	0.976	0.919	0.911
Diameter of Sample (in)	2.416	2.416	2.416
Initial (pre-shear) Values			
Moisture Content (%)		13.3	
Dry Density (pcf)	112.9	111.3	115.4
Saturation %	73.2	70.1	78.4
Void Ratio	0.49	0.51	0.46
Consolidated Void Ratio	0.44	0.40	0.35
Final (post-shear) Values			
Final Moisture Content (%)	21.0	20.4	20.9
Dry Density (pcf)	108.4	114.1	118.1
Saturation %	102.5	115.7	135.4
Void Ratio	0.55	0.48	0.42





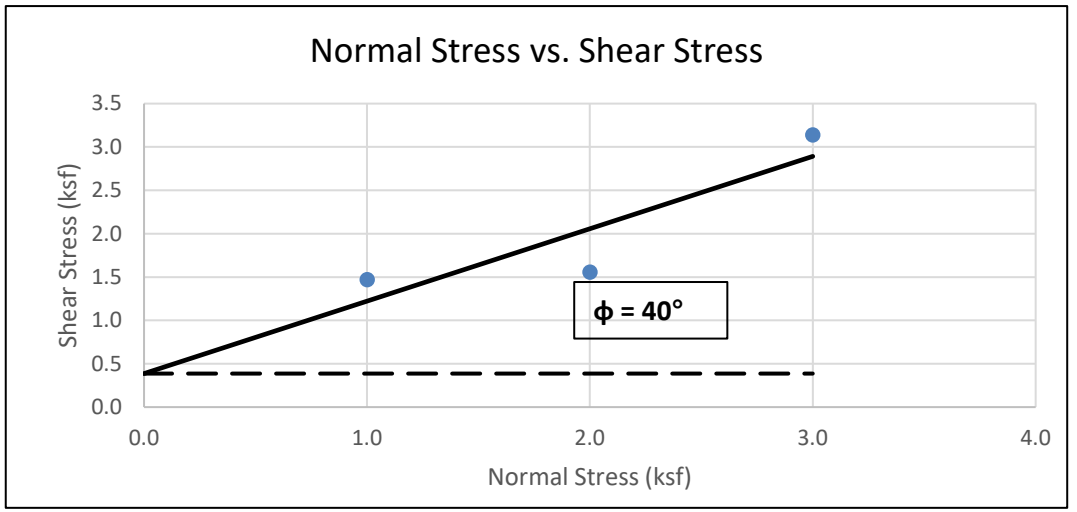
Peak Shear Strength Values	
Slope	0.60
Friction Angle	31
Cohesion (psf)	760

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4729 W. Jacquelyn Ave.
Fresno, CA 93722

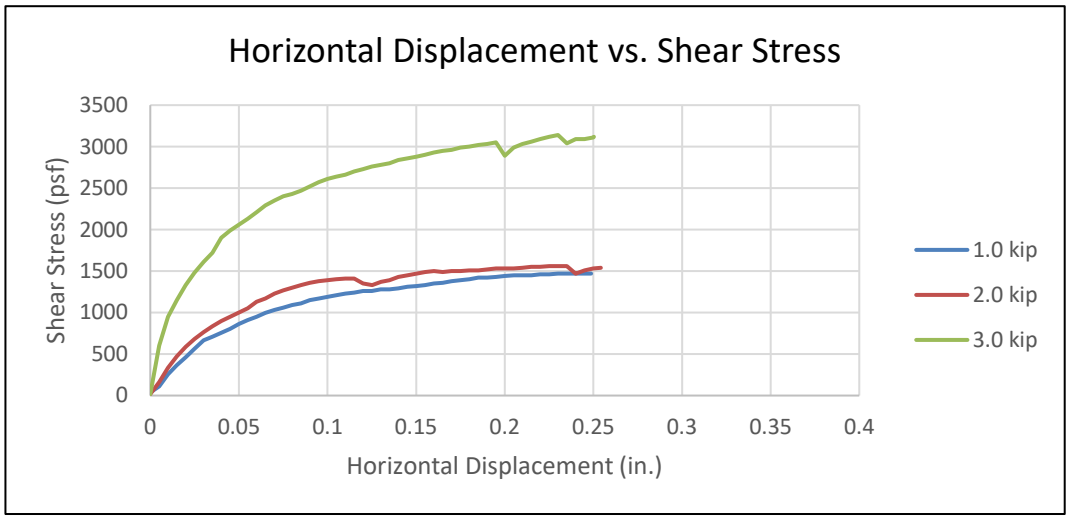
Direct Shear Test (ASTM D3080)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Client: Geist Engineering and Environmental Group, Inc.
Boring: B-1 @ 35'-36.5'
Soil Type: Clayey Sand with Grave
Sample Type: Undisturbed Ring
Tested By: MC / NL
Reviewed By:
Date of Test: 1/13/26
Test Equipment: GeoComp ShearTrac II

	Loading		
	1.0 kip	**2.0 kip**	**3.0 kip**
Normal Stress (ksf)	1.00	2.00	3.00
Shear Rate (in/min)	0.0040	0.0040	0.0040
Peak Shear Stress (ksf)	1.47	1.56	3.14



Initial Height of Sample (in)	1.000	1.000	1.000
Post-Consol. Sample Height (in.)	0.972	0.924	0.935
Post-Shear Sample Height (in.)	0.972	0.914	0.919
Diameter of Sample (in)	2.416	2.416	2.416
Initial (pre-shear) Values			
Moisture Content (%)		15.8	
Dry Density (pcf)	110.7	105.4	109.5
Saturation %	82.6	71.8	79.8
Void Ratio	0.52	0.59	0.53
Consolidated Void Ratio	0.47	0.47	0.43
Final (post-shear) Values			
Final Moisture Content (%)	23.5	22.9	22.4
Dry Density (pcf)	107.0	109.1	111.2
Saturation %	110.8	113.1	123.2
Void Ratio	0.57	0.55	0.49



Peak Shear Strength Values	
Slope	0.84
Friction Angle	40
Cohesion (psf)	387

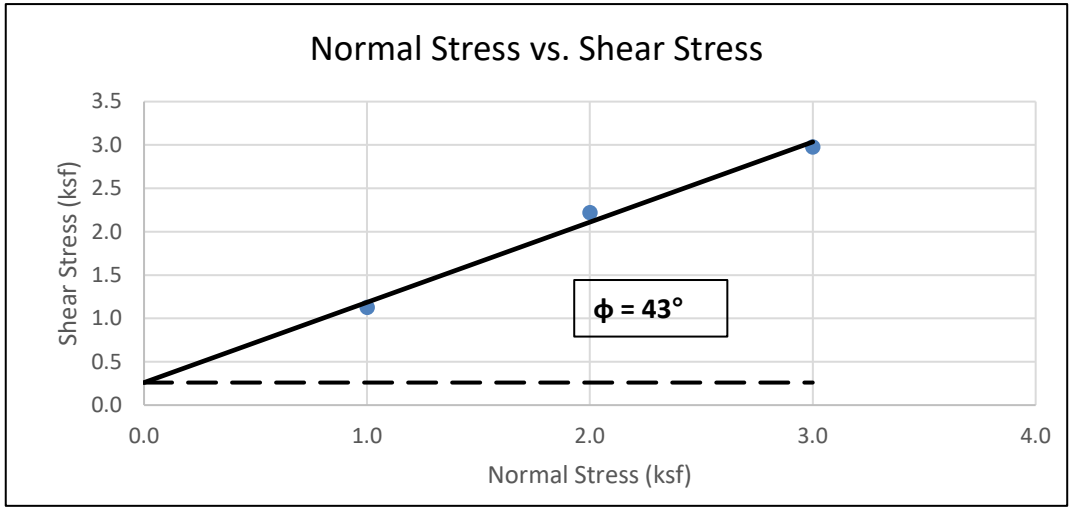
SALEM engineering group, Inc.
4729 W. Jacquelyn Ave.
Fresno, CA 93722

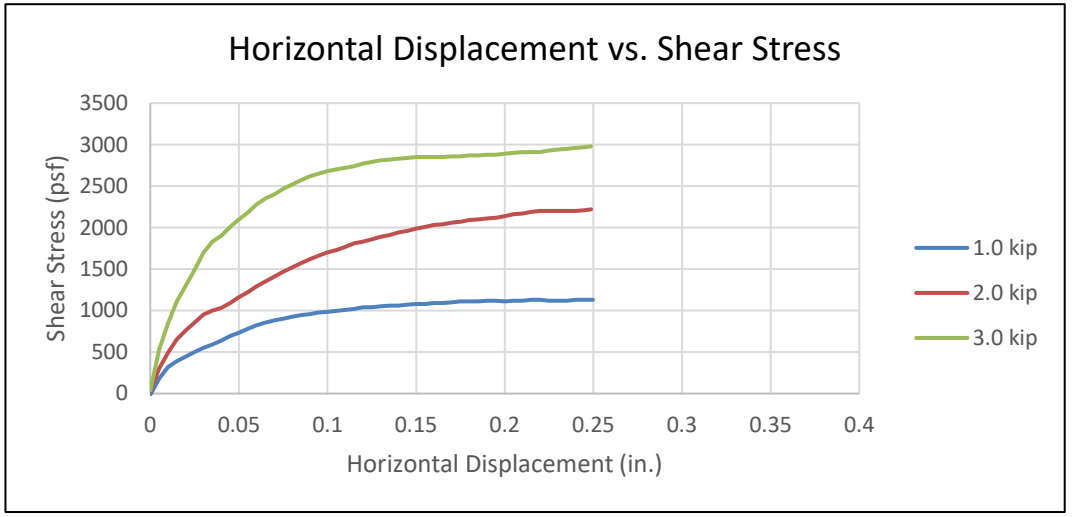
Direct Shear Test (ASTM D3080)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Client: Geist Engineering and Environmental Group, Inc.
Boring: B-1 @ 60'-61.5'
Soil Type: Clayey Sand with Grave
Sample Type: Undisturbed Ring
Tested By: NL / MC
Reviewed By:
Date of Test: 1/13-14/26
Test Equipment: GeoComp ShearTrac II

	Loading		
	1.0 kip	**2.0 kip**	**3.0 kip**
Normal Stress (ksf)	1.00	2.00	3.00
Shear Rate (in/min)	0.0025	0.0025	0.0025
Peak Shear Stress (ksf)	1.13	2.22	2.98

Initial Height of Sample (in)	1.000	1.000	1.000
Post-Consol. Sample Height (in.)	0.954	0.940	0.915
Post-Shear Sample Height (in.)	0.948	0.933	0.904
Diameter of Sample (in)	2.416	2.416	2.416
Initial (pre-shear) Values			
Moisture Content (%)		16.9	
Dry Density (pcf)	106.8	112.5	112.0
Saturation %	77.9	90.3	89.0
Void Ratio	0.59	0.51	0.52
Consolidated Void Ratio	0.52	0.42	0.39
Final (post-shear) Values			
Final Moisture Content (%)	22.5	20.0	20.6
Dry Density (pcf)	107.9	117.9	119.3
Saturation %	105.6	122.1	135.0
Void Ratio	0.58	0.45	0.41



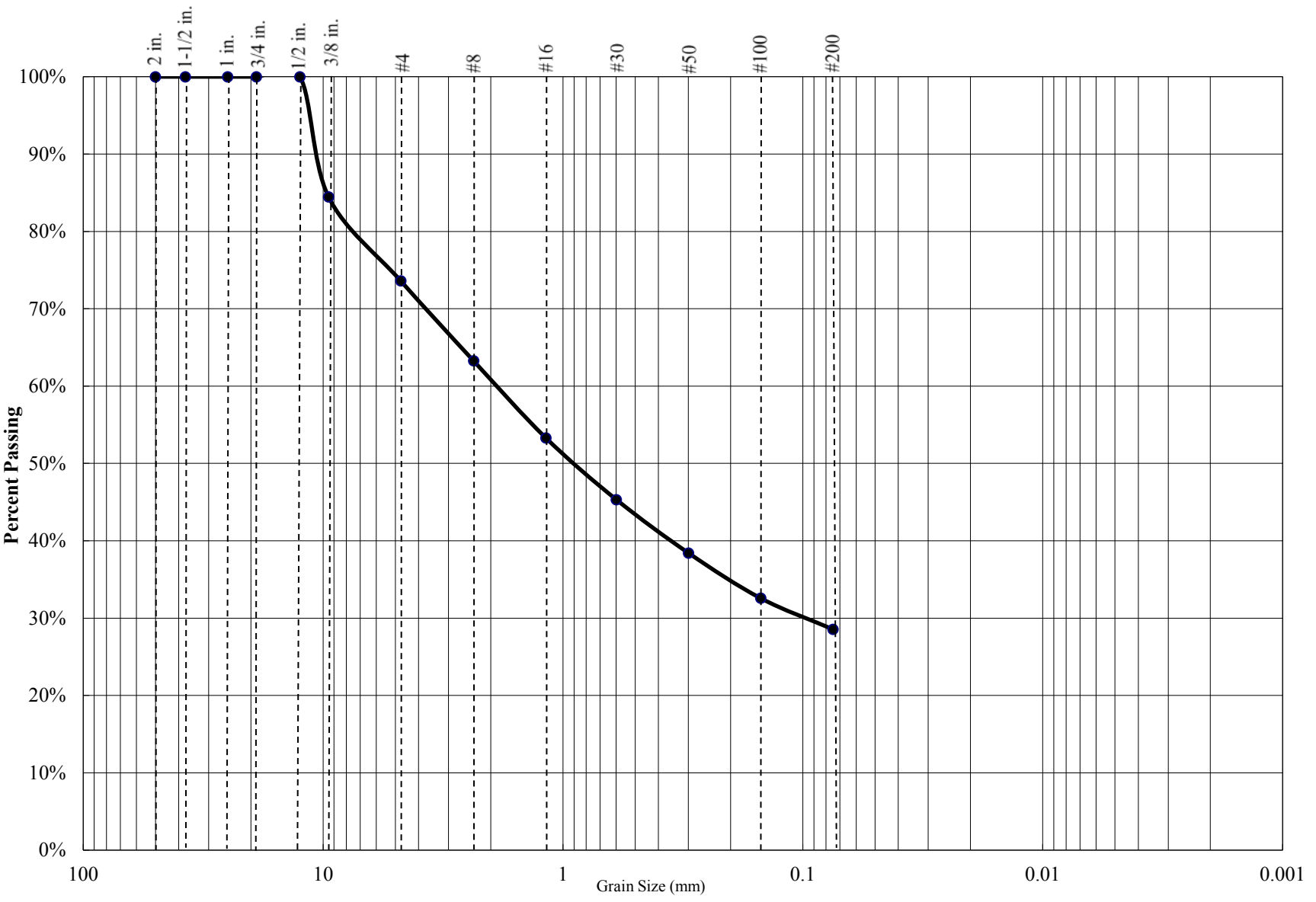


Peak Shear Strength Values	
Slope	0.93
Friction Angle	43
Cohesion (psf)	260

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Fresno, CA 93722

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
26%	45%	29%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	84.5%
#4	73.6%
#8	63.3%
#16	53.3%
#30	45.3%
#50	38.4%
#100	32.6%
#200	28.6%

Atterberg Limits		
PL=	LL=	PI=

Coefficients					
D_{85}=		D_{60}=		D_{50}=	
D_{30}=		D_{15}=		D_{10}=	
C_u=	N/A	C_c=	N/A		

USCS CLASSIFICATION
Clayey Sand with Gravel (SC)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA

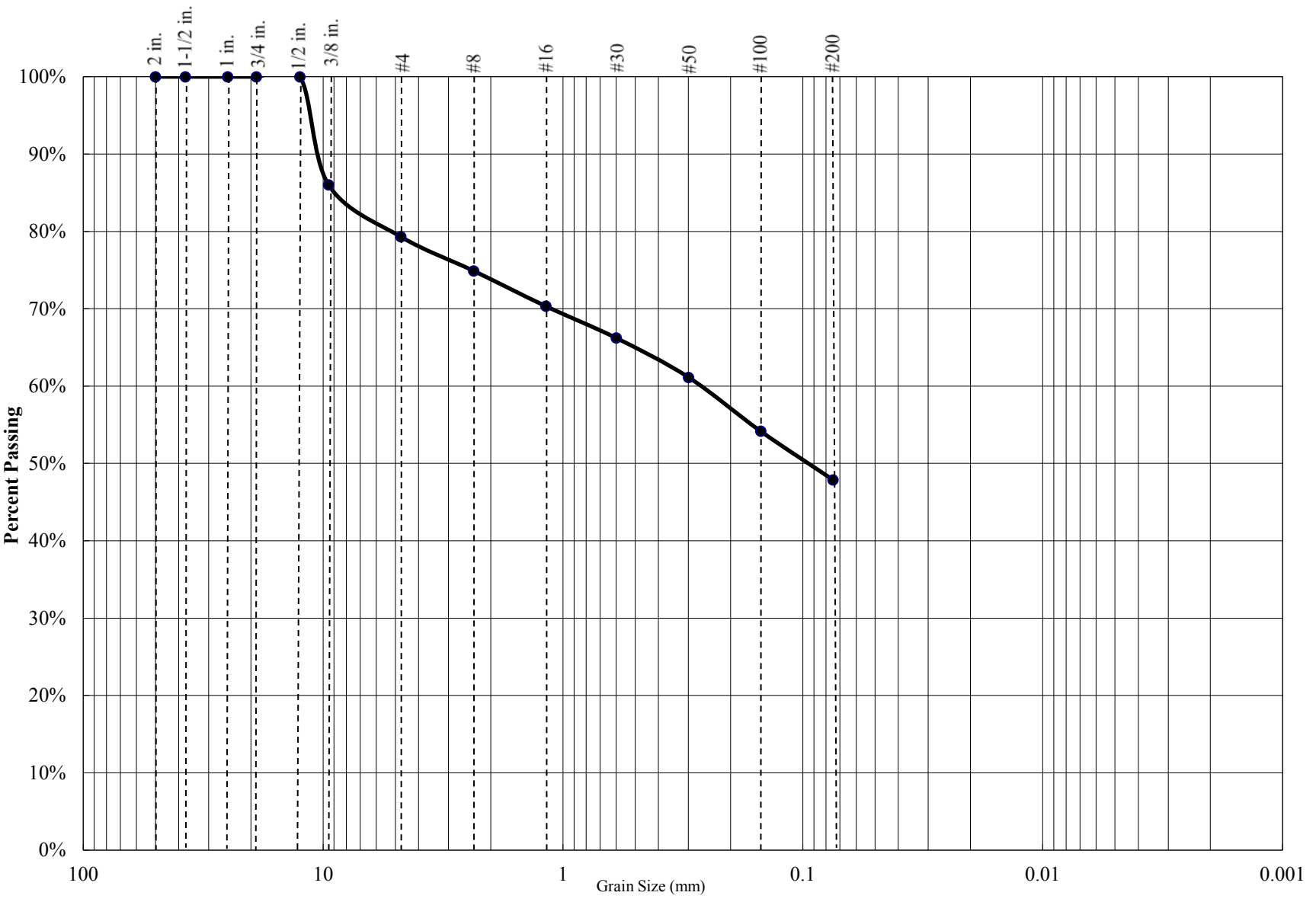
Project Number: 5-225-1076

Boring: B-1 @ 5'-6.5'

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
21%	31%	48%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	86.0%
#4	79.3%
#8	74.9%
#16	70.3%
#30	66.2%
#50	61.1%
#100	54.2%
#200	47.9%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Clayey Sand with Gravel (SC)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA

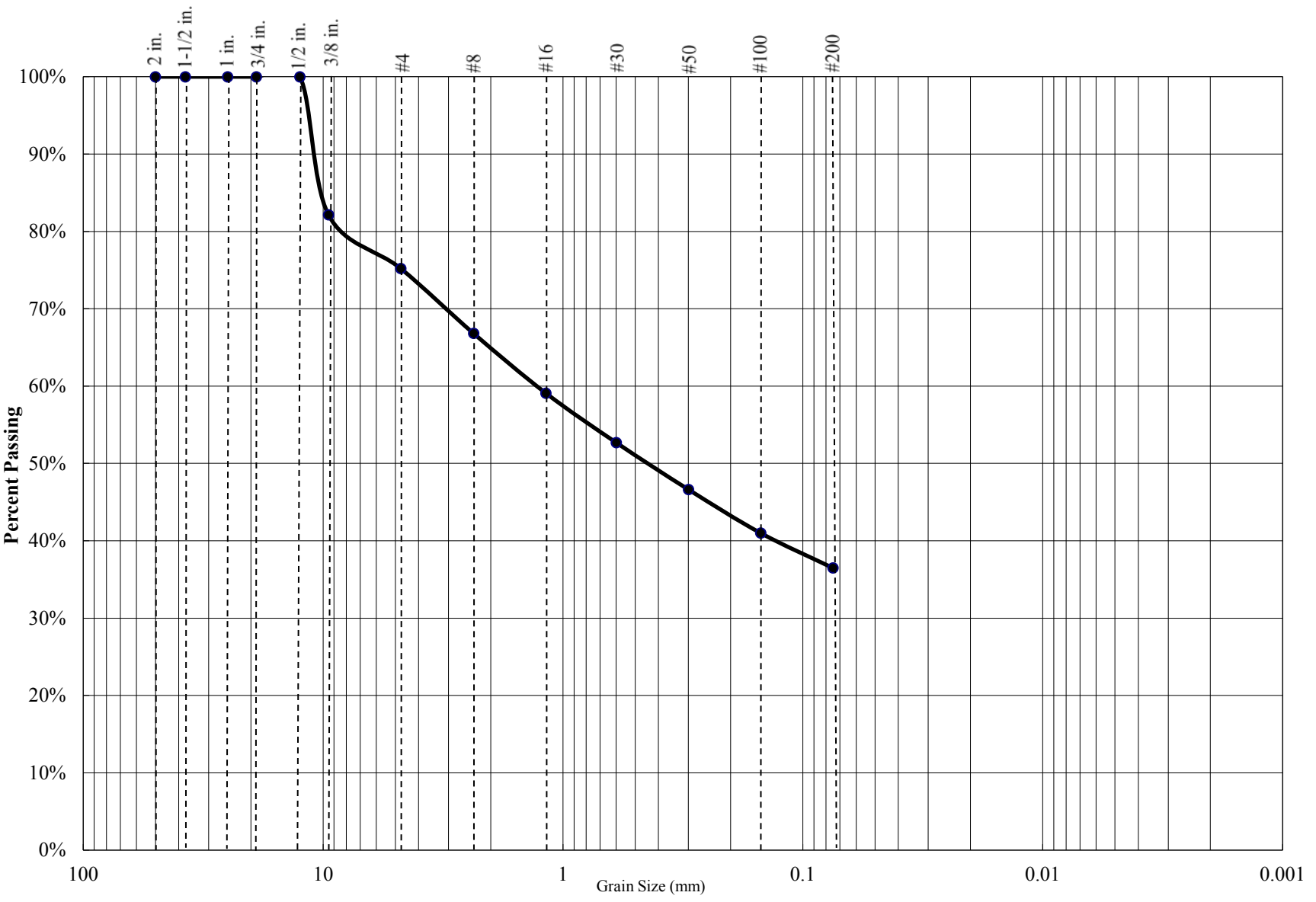
Project Number: 5-225-1076

Boring: B-1 @ 25'-26.5'

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
25%	39%	36%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	82.1%
#4	75.2%
#8	66.8%
#16	59.1%
#30	52.7%
#50	46.6%
#100	41.0%
#200	36.5%

Atterberg Limits		
PL=	LL=	PI=

Coefficients					
D_{85}=		D_{60}=		D_{50}=	
D_{30}=		D_{15}=		D_{10}=	
C_u=	N/A	C_c=	N/A		

USCS CLASSIFICATION
0

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA

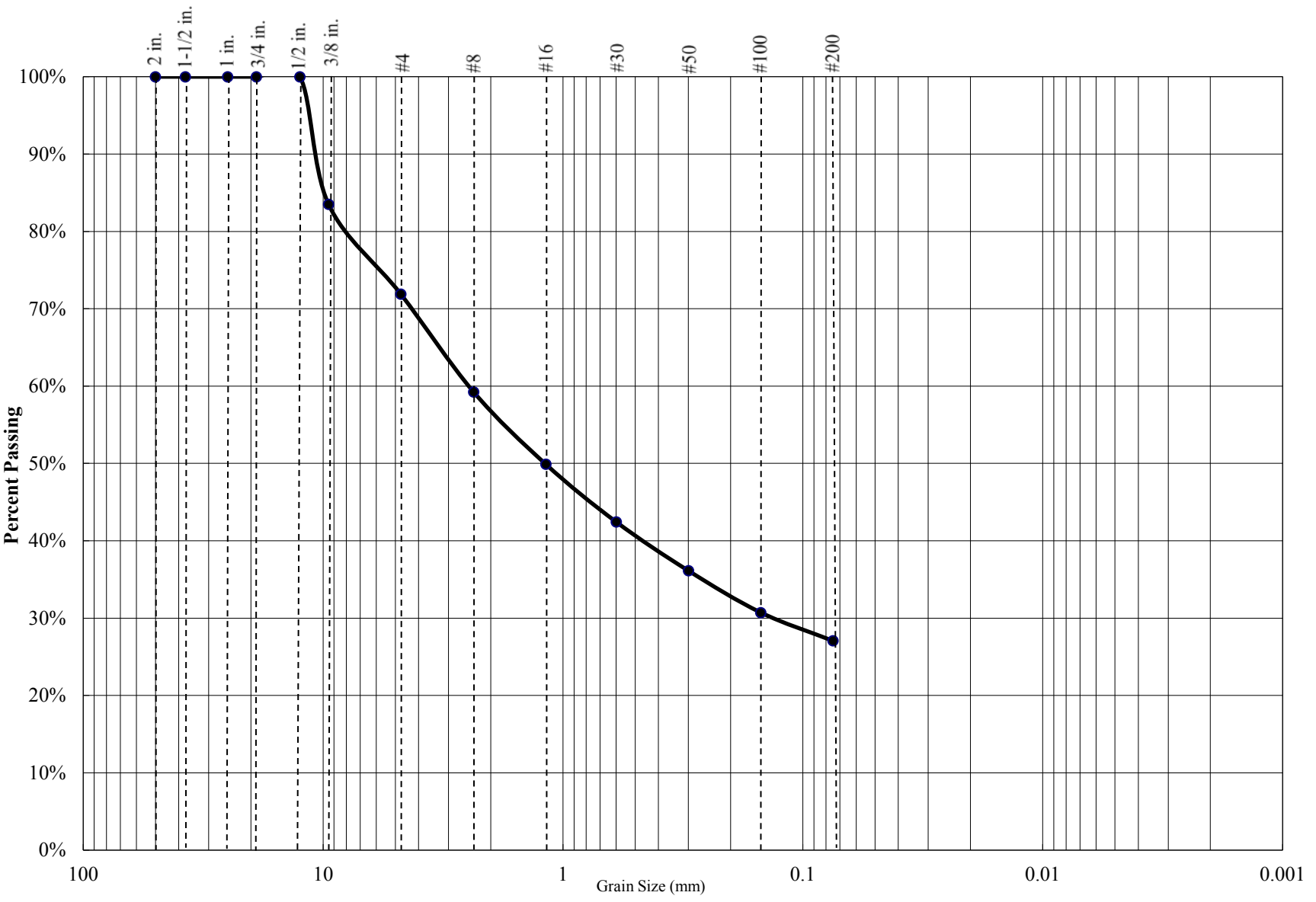
Project Number: 5-225-1076

Boring: B-1 @ 45'-46.5'

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
28%	45%	27%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	83.5%
#4	71.9%
#8	59.2%
#16	49.9%
#30	42.4%
#50	36.1%
#100	30.7%
#200	27.1%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Clayey Sand with Gravel (SC)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA

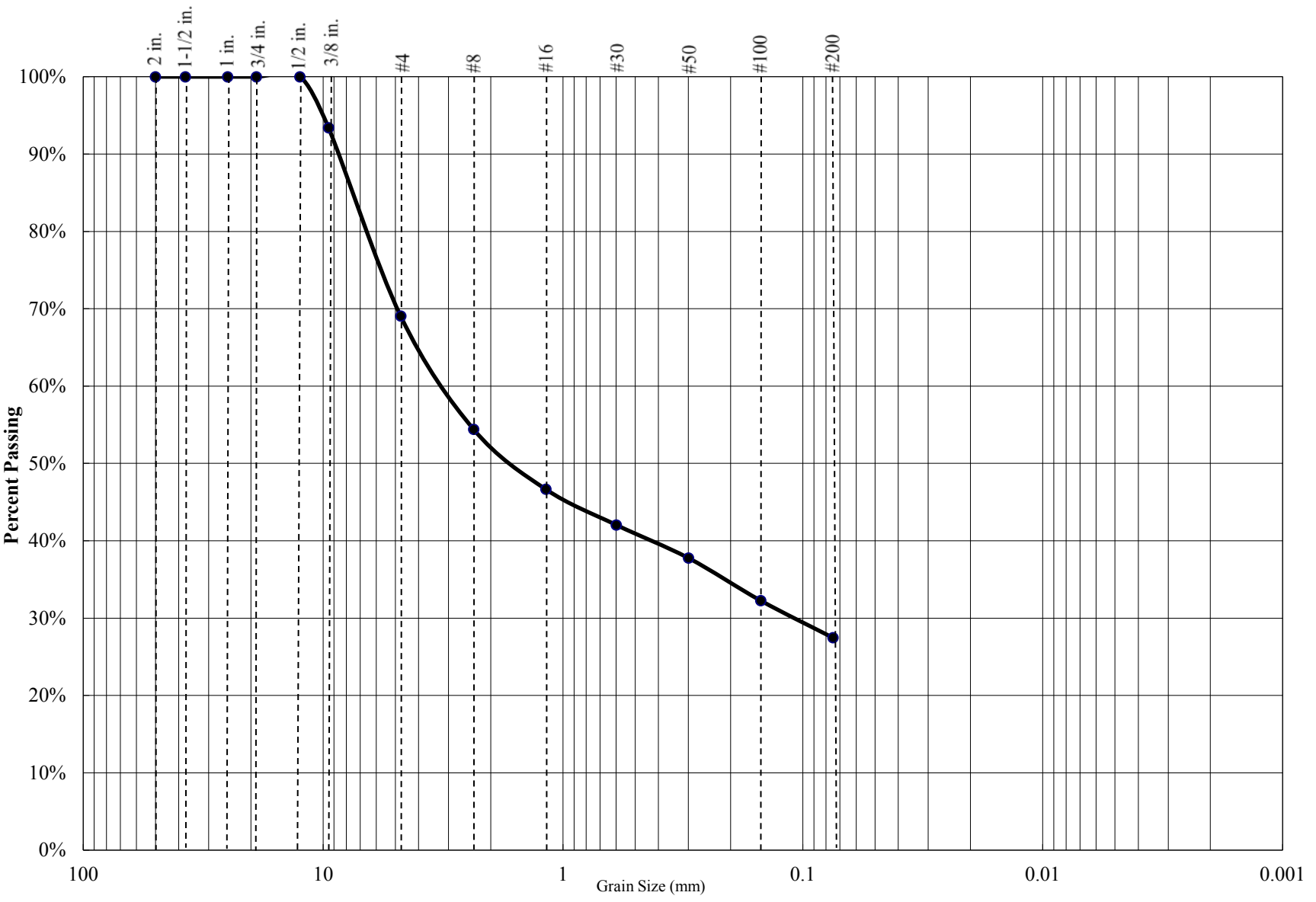
Project Number: 5-225-1076

Boring: B-1 @ 55'-56.5'

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
31%	42%	27%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	93.4%
#4	69.0%
#8	54.4%
#16	46.7%
#30	42.1%
#50	37.8%
#100	32.3%
#200	27.5%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Clayey Sand with Gravel (SC)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA

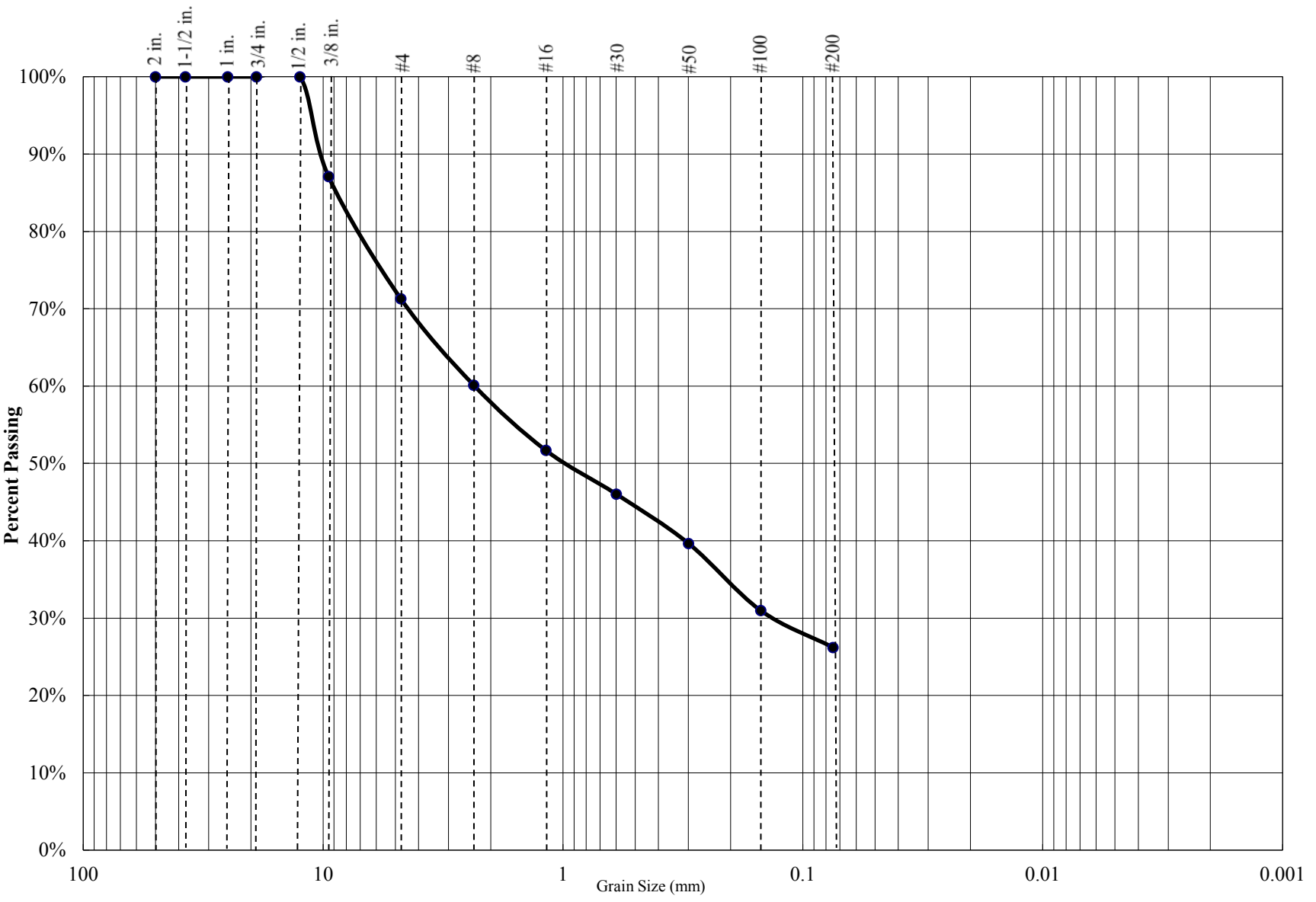
Project Number: 5-225-1076

Boring: B-1 @ 63.5'-65'

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
29%	45%	26%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	87.1%
#4	71.3%
#8	60.1%
#16	51.7%
#30	46.0%
#50	39.7%
#100	31.0%
#200	26.2%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Clayey Sand with Gravel (SC)

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA

Project Number: 5-225-1076

Boring: B-1 @ 73.5'-75'

SALEM engineering group, inc.

CHEMICAL ANALYSIS

SO_4 - Modified CTM 417 & Cl - Modified CTM 417/422

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sampled By: SEG Tested By: MC
Soil Type: Clayey Sand with Gravel (SC)

Sample Number	Sample Location	Soluble Sulfate SO_4-S	Soluble Chloride Cl	pH
1a.	B-1 @ 10'-11.5'	450 mg/kg	82 mg/kg	7.2
1b.	B-1 @ 10'-11.5'	430 mg/kg	79 mg/kg	7.2
1c.	B-1 @ 10'-11.5'	410 mg/kg	80 mg/kg	7.2
Average:		**430 mg/kg**	**80 mg/kg**	**7.2**

SALEM engineering group, inc.

CHEMICAL ANALYSIS

SO_4 - Modified CTM 417 & Cl - Modified CTM 417/422

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sampled By: SEG Tested By: MC
Soil Type: Clayey Sand with Gravel (SC)

Sample Number	Sample Location	Soluble Sulfate SO_4-S	Soluble Chloride Cl	pH
1a.	B-1 @ 30'-31.5'	190 mg/kg	52 mg/kg	7.3
1b.	B-1 @ 30'-31.5'	180 mg/kg	52 mg/kg	7.3
1c.	B-1 @ 30'-31.5'	180 mg/kg	52 mg/kg	7.3
Average:		**183 mg/kg**	**52 mg/kg**	**7.3**

SALEM engineering group, inc.

CHEMICAL ANALYSIS

SO_4 - Modified CTM 417 & Cl - Modified CTM 417/422

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sampled By: SEG Tested By: MC
Soil Type: Clayey Sand with Gravel (SC)

Sample Number	Sample Location	Soluble Sulfate SO_4-S	Soluble Chloride Cl	pH
1a.	B-1 @ 51.5'-53'	210 mg/kg	54 mg/kg	7.2
1b.	B-1 @ 51.5'-53'	220 mg/kg	55 mg/kg	7.2
1c.	B-1 @ 51.5'-53'	230 mg/kg	54 mg/kg	7.2
Average:		**220 mg/kg**	**54 mg/kg**	**7.2**

SALEM
engineering group, inc.

CHEMICAL ANALYSIS

SO_4 - Modified CTM 417 & Cl - Modified CTM 417/422

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sampled By: SEG Tested By: MC
Soil Type: Clayey Sand with Gravel (SC)

Sample Number	Sample Location	Soluble Sulfate SO_4-S	Soluble Chloride Cl	pH
1a.	B-1 @ 61.5'-63'	340 mg/kg	56 mg/kg	7.4
1b.	B-1 @ 61.5'-63'	330 mg/kg	58 mg/kg	7.4
1c.	B-1 @ 61.5'-63'	330 mg/kg	57 mg/kg	7.4
Average:		**333 mg/kg**	**57 mg/kg**	**7.4**

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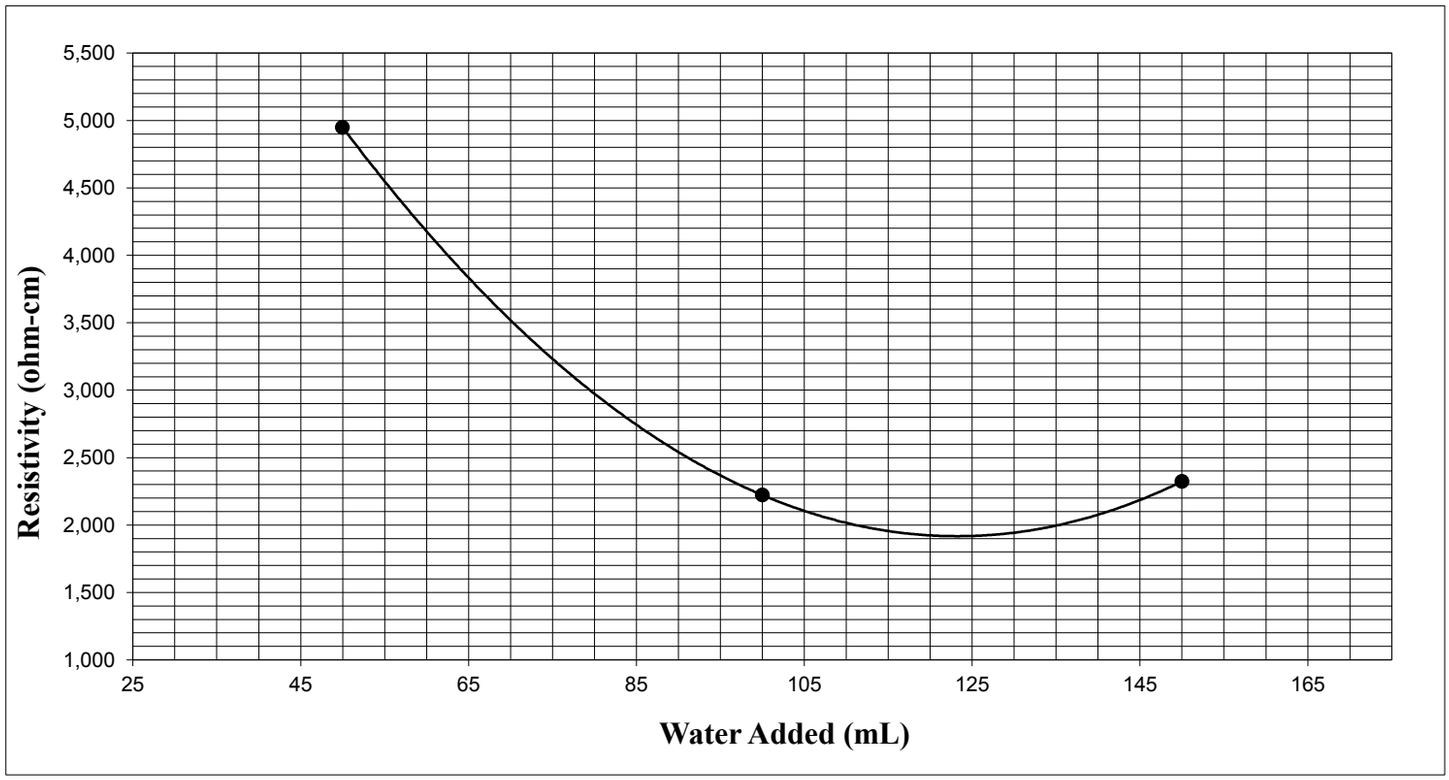
SOIL RESISTIVITY
CTM 643

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076 Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sample Location: B-1 @ 10'-11.5' Sampled By: SEG Tested By: FP
Soil Type: Clayey Sand with Gravel (SC)

Chloride Content:	80	mg/Kg	Initial Sample Weight:	700	gms
Sulfate Content:	430	mg/Kg	Test Box Constant:	1.010	cm
Soil pH:	7.2				

Test Data:

Trial #	Water Added (mL)	Meter Dial Reading	Multiplier Setting	Resistance (ohms)	Resistivity (ohm-cm)
1	50	4.9	1,000	4,900	4,949
2	100	2.2	1,000	2,200	2,222
3	150	2.3	1,000	2,300	2,323



Minimum Resistivity:	**1,916** ohm-cm

SALEM engineering group, inc.

Atterberg Limits Determination
ASTM D4318

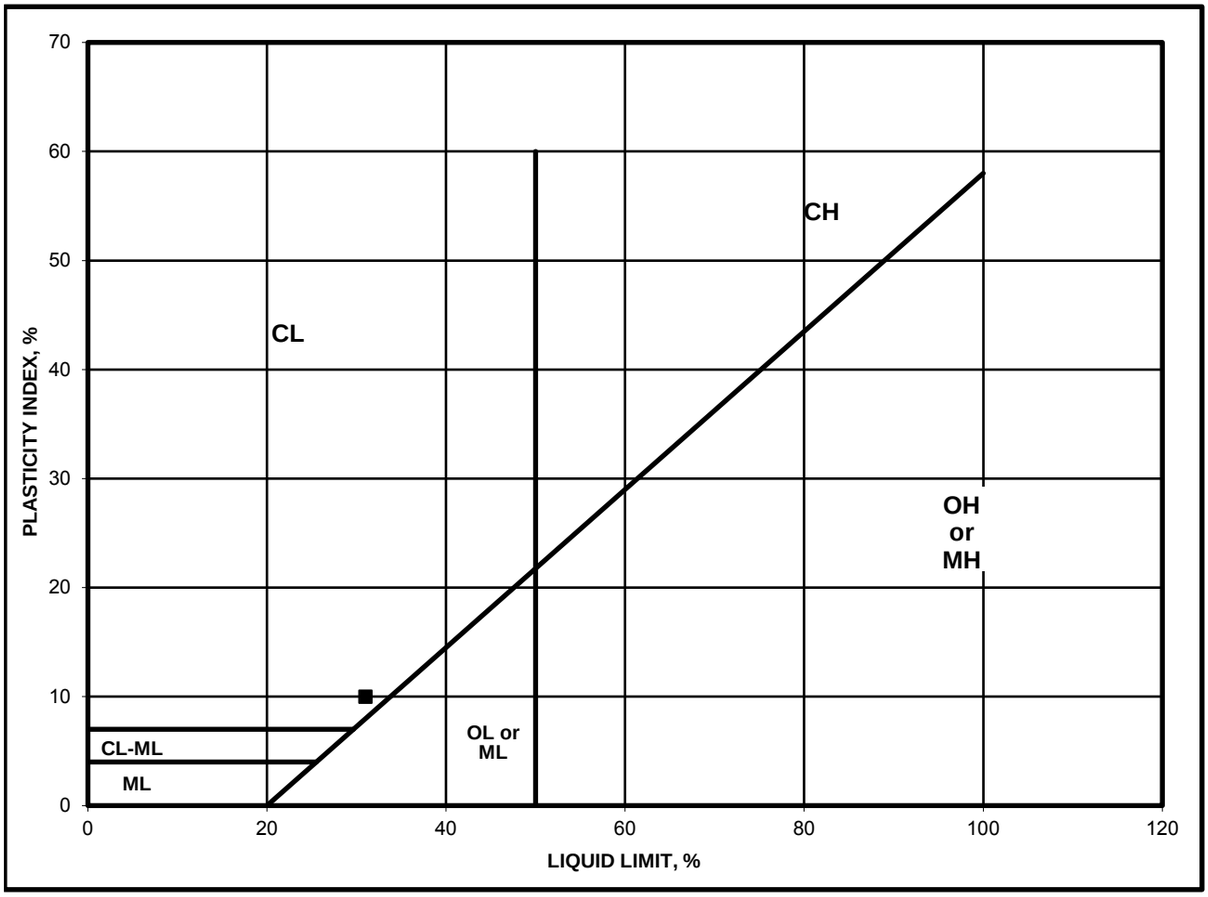
Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/12/26
Sampled By: SEG Tested By: MC
Sample Location: B-1 @ 5'-6.5'

Run Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare	23.21	23.14	23.15	27.26	28.03	27.73
Weight of Dry Soil & Tare	21.89	21.86	21.85	24.53	25.09	24.77
Weight of Water	1.32	1.28	1.30	2.73	2.94	2.96
Weight of Tare	15.60	15.78	15.70	15.62	15.71	15.64
Weight of Dry Soil	6.29	6.08	6.15	8.91	9.38	9.13
Water Content	21.0	21.1	21.1	30.6	31.3	32.4
Number of Blows				28	24	19

Plastic Limit : 21 **Liquid Limit : 31**

Plasticity Index : 10

Unified Soil Classification : CL



SALEM engineering group, inc.

Atterberg Limits Determination
ASTM D4318

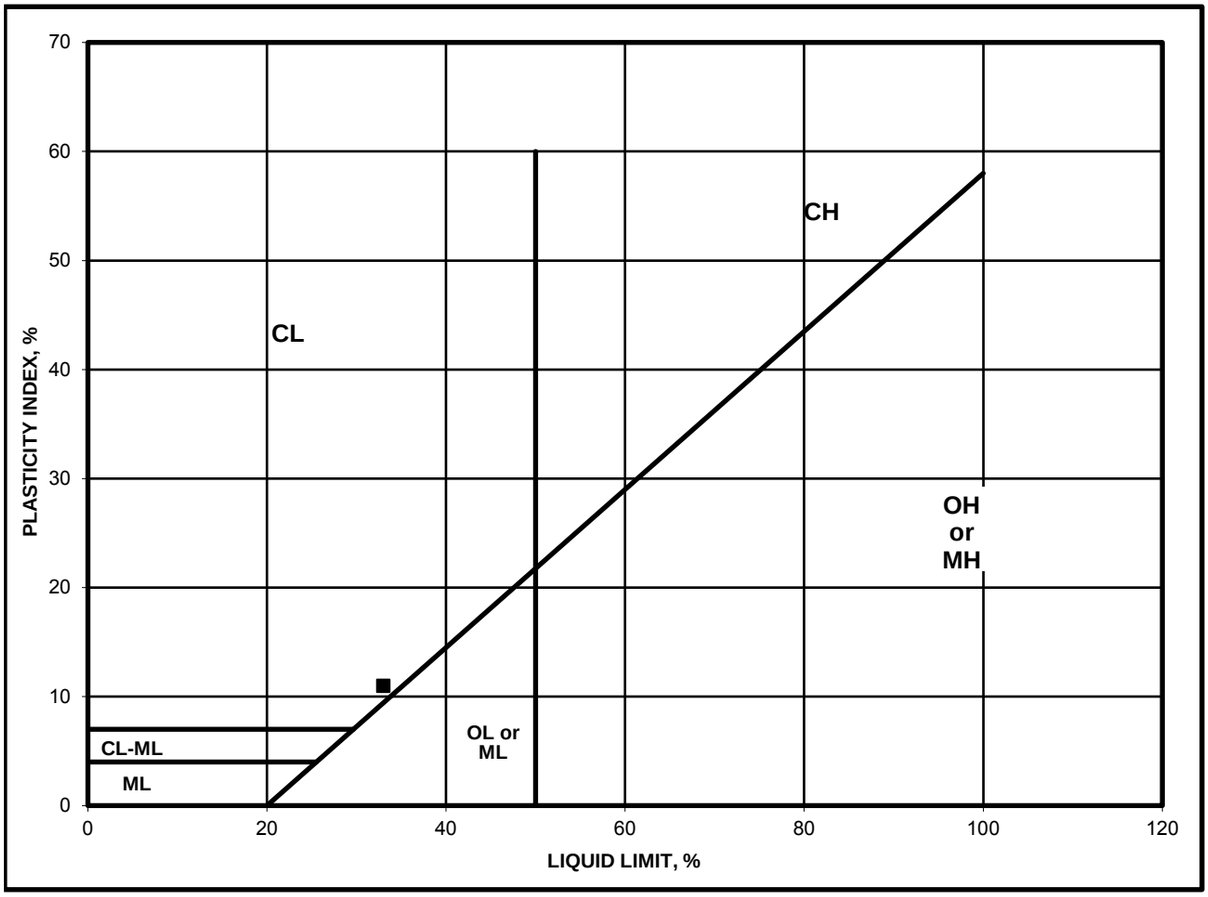
Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sampled By: SEG Tested By: MC
Sample Location: B-1 @ 25'-26.5'

Run Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare	22.95	23.03	23.20	29.34	28.80	29.35
Weight of Dry Soil & Tare	21.62	21.67	21.85	26.01	25.50	25.87
Weight of Water	1.33	1.36	1.35	3.33	3.30	3.48
Weight of Tare	15.55	15.44	15.55	15.71	15.57	15.66
Weight of Dry Soil	6.07	6.23	6.30	10.30	9.93	10.21
Water Content	21.9	21.8	21.4	32.3	33.2	34.1
Number of Blows				29	24	18

Plastic Limit : 22 **Liquid Limit : 33**

Plasticity Index : 11

Unified Soil Classification : CL



SALEM engineering group, inc.

Atterberg Limits Determination
ASTM D4318

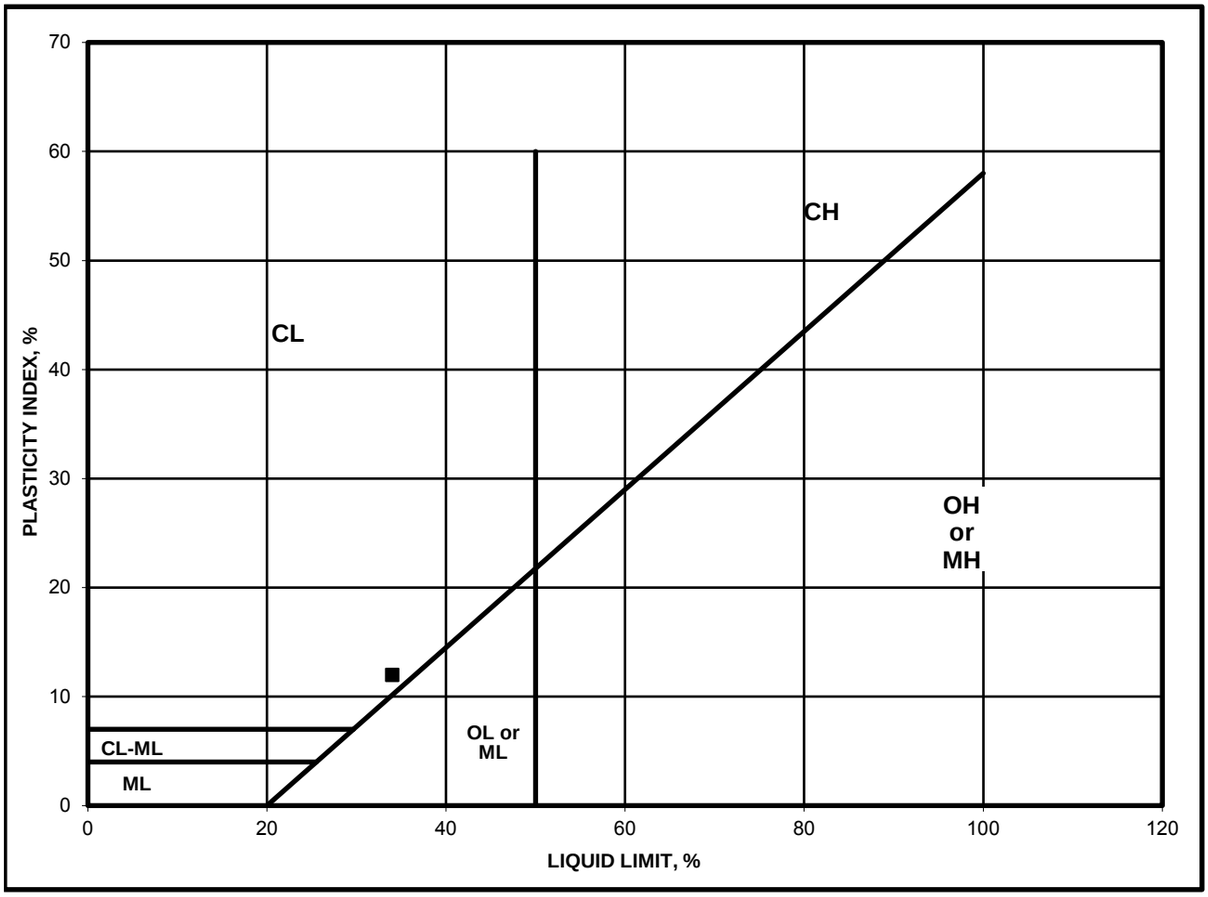
Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sampled By: SEG Tested By: MC
Sample Location: B-1 @ 45'-46.5'

Run Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare	29.59	29.38	29.79	34.94	34.30	33.61
Weight of Dry Soil & Tare	28.18	27.96	28.36	31.55	30.89	30.53
Weight of Water	1.41	1.42	1.43	3.39	3.41	3.08
Weight of Tare	21.79	21.51	22.03	21.35	21.01	21.73
Weight of Dry Soil	6.39	6.45	6.33	10.20	9.88	8.80
Water Content	22.1	22.0	22.6	33.2	34.5	35.0
Number of Blows				30	25	19

Plastic Limit : 22 **Liquid Limit : 34**

Plasticity Index : 12

Unified Soil Classification : CL



SALEM engineering group, inc.

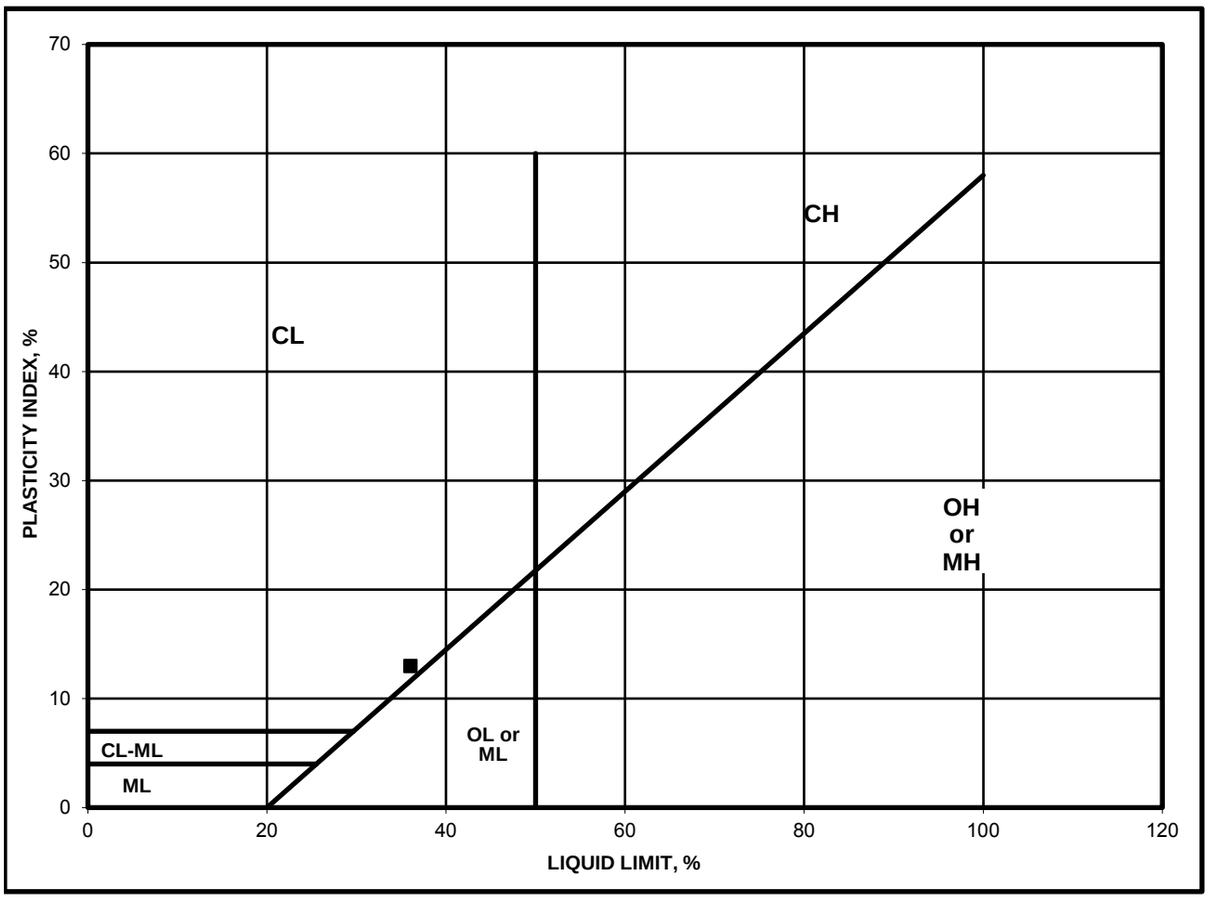
Atterberg Limits Determination
ASTM D4318

Project Name: AT&T 103' Monopole CCL05350: SF Police Academy - San Francisco, CA
Project Number: 5-225-1076
Date Sampled: 12/29-30/25 Date Tested: 1/9/26
Sampled By: SEG Tested By: MC
Sample Location: B-1 @ 55'-56.5'

Run Number	Plastic Limit			Liquid Limit		
	1	2	3	1	2	3
Weight of Wet Soil & Tare	22.88	22.87	22.98	28.34	28.77	27.44
Weight of Dry Soil & Tare	21.54	21.53	21.59	25.02	25.21	24.27
Weight of Water	1.34	1.34	1.39	3.32	3.56	3.17
Weight of Tare	15.57	15.62	15.41	15.65	15.35	15.68
Weight of Dry Soil	5.97	5.91	6.18	9.37	9.86	8.59
Water Content	22.4	22.7	22.5	35.4	36.1	36.9
Number of Blows				31	26	21

Plastic Limit : 23 **Liquid Limit : 36**

Plasticity Index : 13
Unified Soil Classification : CL



SALEM engineering group, inc.

APPENDIX

C

APPENDIX C
GENERAL EARTHWORK SPECIFICATIONS

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

1.0 SCOPE OF WORK: These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including, but not limited to, the furnishing of all labor, tools and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans and disposal of excess materials.

2.0 PERFORMANCE: The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of SALEM Engineering Group, Incorporated, hereinafter referred to as the Soils Engineer and/or Testing Agency. Attainment of design grades, when achieved, shall be certified by the project Civil Engineer. Both the Soils Engineer and the Civil Engineer are the Owner's representatives. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary adjustments until all work is deemed satisfactory as determined by both the Soils Engineer and the Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Soils Engineer, Civil Engineer, or project Architect.

No earthwork shall be performed without the physical presence or approval of the Soils Engineer. The Contractor shall notify the Soils Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner or the Engineers.

3.0 TECHNICAL REQUIREMENTS: All compacted materials shall be densified to no less that 90 percent of relative compaction (based on ASTM D1557 Test Method (latest edition), or as specified in the technical portion of the Soil Engineer's report. The location and frequency of field density tests shall be determined by the Soils Engineer. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Soils Engineer.

4.0 SOILS AND FOUNDATION CONDITIONS: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the Geotechnical Engineering Report. The Contractor shall make his own interpretation of the data contained in the Geotechnical Engineering Report and the Contractor shall not be relieved of liability for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.

5.0 DUST CONTROL: The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation

either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including court costs of codefendants, for all claims related to dust or wind-blown materials attributable to his work. Site preparation shall consist of site clearing and grubbing and preparation of foundation materials for receiving fill.

6.0 CLEARING AND GRUBBING: The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter and all other matter determined by the Soils Engineer to be deleterious. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed improvement areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots greater than 1 inch in diameter. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations is not permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

7.0 SUBGRADE PREPARATION: Surfaces to receive Engineered Fill and/or building or slab loads shall be prepared as outlined above, scarified to a minimum of 12 inches, moisture-conditioned as necessary, and compacted to 90 percent relative compaction.

Loose soil areas and/or areas of disturbed soil shall be moisture-conditioned as necessary and compacted to 90 percent relative compaction. All ruts, hummocks, or other uneven surface features shall be removed by surface grading prior to placement of any fill materials. All areas which are to receive fill materials shall be approved by the Soils Engineer prior to the placement of any fill material.

8.0 EXCAVATION: All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over-excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

9.0 FILL AND BACKFILL MATERIAL: No material shall be moved or compacted without the presence or approval of the Soils Engineer. Material from the required site excavation may be utilized for construction site fills, provided prior approval is given by the Soils Engineer. All materials utilized for constructing site fills shall be free from vegetation or other deleterious matter as determined by the Soils Engineer.

10.0 PLACEMENT, SPREADING AND COMPACTION: The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. Compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Soils Engineer. Both cut and fill shall be surface-compacted to the satisfaction of the Soils Engineer prior to final acceptance.

11.0 SEASONAL LIMITS: No fill material shall be placed, spread, or rolled while it is frozen or thawing, or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of previously placed fill is as specified.

12.0 DEFINITIONS - The term "pavement" shall include asphaltic concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

The term "Standard Specifications": hereinafter referred to, is the most recent edition of the Standard Specifications of the State of California, Department of Transportation. The term "relative compaction" refers to the field density expressed as a percentage of the maximum laboratory density as determined by ASTM D1557 Test Method (latest edition).

13.0 PREPARATION OF THE SUBGRADE - The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum relative compaction of 90 percent based upon ASTM D1557. The finished subgrades shall be tested and approved by the Soils Engineer prior to the placement of additional pavement courses.

14.0 AGGREGATE BASE - The aggregate base material shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base material shall conform to the requirements of Section 26 of the Standard Specifications for Class 2 material, ¾-inch or 1½-inches maximum size. The aggregate base material shall be compacted to a minimum relative compaction of 90 percent based upon ASTM D1557. The aggregate base material shall be spread in layers not exceeding 6 inches and each layer of aggregate material course shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

15.0 AGGREGATE SUBBASE - The aggregate subbase shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate subbase material shall conform to the requirements of Section 25 of the Standard Specifications for Class 2 Subbase material, and it shall be spread and compacted in accordance with the Standard Specifications. Each layer of aggregate subbase shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

16.0 ASPHALTIC CONCRETE SURFACING - Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at a central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades, and dimensions shown on the plans. The viscosity grade of the asphalt shall be PG 64-10, unless otherwise stipulated or local conditions warrant more stringent grade. The mineral aggregate shall be Type A or B, ½ inch maximum size, medium grading, and shall conform to the requirements set forth in Section 39 of the Standard Specifications. The drying, proportioning, and mixing of the materials shall conform to Section 39. The prime coat, spreading and compacting equipment, and spreading and compacting the mixture shall conform to the applicable chapters of Section 39, with the exception that no surface course shall be placed when the atmospheric temperature is below 50 degrees F. The surfacing shall be rolled with a combination steel-wheel and pneumatic rollers, as described in the Standard Specifications. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.

Exhibit C

Exhibit C

at&t

SF POLICE ACADEMY

SITE #: CCL05350

103'-0" MONOPOLE

LOCATION:

350 AMBER DRIVE
SAN FRANCISCO, CA 94131
SAN FRANCISCO COUNTY

DRAWING INDEX

T1	TITLE SHEET
N1	NOTES & SPECIFICATIONS
S1	ELEVATION VIEWS
S2-S3	DETAILS
S4	DRILLED PIER

NOTE: FOR ORDERING CONTACT
PAUL MARY – PROJECT MANAGER/
SENIOR ESTIMATOR
STEELHEAD METAL & FAB
O – (971) 915–2843
C – (503) 735–5456
PAULM@STEELHEADMETAL.NET

VECTOR ENGINEERS
651 W. Galena Park Blvd., Suite 101
Draper, UT 84020
(801) 990-1775
www.vectorse.com

STEELHEAD METAL & FAB, LLC
P.O. Box 3850 Salem OR, 97302
Ph: (503) 763-0114
Toll Free: 1-877-900-6789
Fax (503) 763-6280
www.steelheadmetals.com

DATE: 1/28/26	DESIGNED: MAR	DRAFTER: MAR

REVISIONS

REV	DATE	DESCRIPTION

AT&T

TITLE SHEET

SF POLICE ACADEMY
SITE #: CCL05350
103'-0" MONOPOLE
350 AMBER DRIVE
SAN FRANCISCO, CA 94131
SAN FRANCISCO COUNTY

REGISTERED PROFESSIONAL ENGINEER
CASEY N. MILLARD
C 90109
CIVIL
STATE OF CALIFORNIA

01/28/2026

U1133.0725.261

T1

REV 0

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DESIGN CRITERIA

STRUCTURAL DESIGN IS BASED ON THE CALIFORNIA BUILDING CODE, 2025 EDITION (2024 IBC) AND THE TIA-222-I STANDARD

DESIGN LOADS:

- WIND:
  - □ WIND SPEED = 99 MPH (3-SEC GUST) PER THE ASCE7-22 STANDARD
  - □ RISK CATEGORY: III
  - □ EXPOSURE: C
  - □ Kzt: 1
  - □ ELEVATION: 560 FT ABOVE SEA LEVEL
- ICE:
  - □ NONE PER THE TIA-222-I STANDARD

- SEISMIC:
  - □ IMPORTANCE FACTOR: 1.25
  - □ RISK CATEGORY: III
  - □ MAPPED SPECTRAL RESPONSE ACCELERATIONS:
    - S_S = 1.840g, S_1 = 0.700g
  - □ SITE CLASS: D
  - □ SPECTRAL RESPONSE COEFFICIENTS:
    - S_{DS} = 1.300g, S_{D1} = 1.380g
  - □ SEISMIC DESIGN CATEGORY: D
  - □ BASIC SEISMIC-FORCE-RESISTING-SYSTEM:
    - TELECOM: STEEL POLE
  - □ SEISMIC BASE SHEAR, V: 6.0 K
  - □ SEISMIC RESPONSE COEFFICIENT, Cs: 0.359
  - □ RESPONSE MODIFICATION FACTOR, R: 1.5
  - □ ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

STRUCTURAL STEEL

1. POLYGONAL MONOPOLE SHAFT STEEL SHALL CONFORM w/ ASTM A572 GR. 65, UNO
2. BASEPLATE STEEL SHALL CONFORM w/ ASTM A572 GR 50, UNO
3. ALL STEEL PIPE SHALL CONFORM w/ ASTM A53 GR B (35 KSI), UNO ACCEPTABLE PIPE MATERIAL ALTERNATIVES INCLUDE: A500 GR B., A106 GR B. AND API 5LX 42KSI.
4. ALL STEEL RECTANGULAR TUBES (HSS) SHALL CONFORM w/ ASTM A500 GR B (46 KSI), UNO
5. REINFORCED PORT STEEL SHALL CONFORM w/ ASTM A572 GR 50 OR EQUIVALENT, UNO
6. ALL OTHER STEEL SHAPES & PLATES SHALL CONFORM w/ ASTM A36, UNO
7. ALL BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL CONFORM w/ ASTM F3125 GR A325, UNO
8. ALL U-BOLTS SHALL CONFORM w/ ASTM A36, UNO
9. ALL ANCHOR BOLTS SHALL CONFORM w/ ASTM F1554 GR. 55, UNO
10. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND PROCEDURES OF THE AMERICAN WELDING SOCIETY (AWS) BY CERTIFIED WELDERS PER AWS D1.1. WELDS SHALL BE PERFORMED WITH MINIMUM E70XX OR E71XX LOW-HYDROGEN ELECTRODE EXCEPT WHERE HIGHER STRENGTH ELECTRODE IS REQUIRED BY AWS D1.1.
11. ALL STEEL SURFACES SHALL BE GALVANIZED IN ACCORDANCE w/ ASTM A123 AND ASTM F2329 STANDARDS.
12. ALL STRUCTURAL BOLTS SHALL BE TIGHTENED PER AN APPROVED PRETENSIONING METHOD AS DEFINED BY AISC. FOR EASE OF INSPECTION, THE "TURN-OF-NUT" METHOD AS DEFINED BY AISC WITH MATCH-MARKING TECHNIQUES IS RECOMMENDED.
13. ALL BOLT HOLES SHALL BE STANDARD SIZE PER TABLE J3.3 OF AISC UNO WASHERS ARE REQUIRED FOR ANY CONNECTION THAT HAS LARGER THAN STANDARD SIZED BOLT HOLES.
14. ALL HEAVY HEX NUTS SHALL BE ASTM A563 GR C OR DH OR EQUIVALENT.
15. ALL HARDENED WASHERS SHALL BE ASTM F436 OR EQUIVALENT.

BASE DESIGN REACTIONS

- MOMENT, M = 798 K-FT (1.0 WIND)
- SHEAR, V = 9.6 K (1.0 WIND)
- AXIAL, R = 20.0 K (1.2 DEAD)

GENERAL NOTES

1) CONTRACTOR SHALL FIELD VERIFY SITE OR LAYOUT RESTRICTIONS, SITE CONDITIONS, DIMENSIONS, AND ELEVATIONS BEFORE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF STEELHEAD, INC. PRIOR TO BEGINNING PROJECT. ALL WORK SHALL BE PERFORMED USING ACCEPTED CONSTRUCTION PRACTICES. CONTRACTOR TO VERIFY MATERIALS PROVIDED BY STEELHEAD PRIOR TO INSTALLATION.
2) ALL ENGINEERING PLANS, DRAWINGS, DESIGNS, CALCULATIONS AND SPECIFICATIONS (COLLECTIVELY, "PLANS") ARE DESIGNED TO THE PROPRIETARY MANUFACTURING SPECIFICATIONS OF STEELHEAD METAL AND FAB., LLC ("STEELHEAD") INTENDED AND AUTHORIZED SOLELY FOR USE WITH PRODUCT PRODUCED BY STEELHEAD. UNAUTHORIZED USE IS STRICTLY PROHIBITED. CUSTOMER AGREES TO DEFEND, INDEMNIFY AND HOLD STEELHEAD HARMLESS FROM AND AGAINST ANY AND ALL DEMANDS, CLAIMS, SUITS, PROCEEDINGS, LOSSES, LIABILITIES, DAMAGES, FEES, COSTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, REASONABLE ATTORNEYS' FEES AND COSTS) ARISING FROM OR RELATING TO ANY UNAUTHORIZED USE OF STEELHEAD'S PLANS BY CUSTOMER.
3) NO FIELD MODIFICATIONS MAY BE MADE TO STRUCTURE WITHOUT THE EXPRESS WRITTEN CONSENT FROM THE ENGINEER OF RECORD. STEELHEAD, INC AND ENGINEER OF RECORD ASSUME NO RESPONSIBILITY FOR THE STRUCTURE IF ALTERATIONS AND/OR ADDITIONS ARE MADE TO THE DESIGN AS SHOWN IN THESE DRAWINGS.
4) THE CONTRACTORS AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES, REGULATIONS, AND ORDINANCES AS WELL AS STATE DEPARTMENT OF INDUSTRIAL REGULATIONS AND DIVISION OF INDUSTRIAL SAFETY (OSHA) REQUIREMENTS.
5) THE CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK TO THE BEST OF HIS/HER ABILITY AND SKILL. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, AND SEQUENCES, AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
6) THE CONTRACTOR SHALL VERIFY, COORDINATE, AND PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORTS FOR ALL ITEMS REQUIRING SAME. WHETHER SHOWN OR NOT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, FORMWORK, ETC., AND SHALL CONFORM TO ALL NATIONAL , STATE, AND LOCAL ORDINANCES AND CODES, IN ORDER TO SAFELY EXECUTE ALL STAGES OF WORK TO COMPLETE THIS PROJECT.
7) IT IS THE INTENT OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION OF THE STRUCTURE SHOWN.
8) CONTRACTOR ASSUMES RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THIS REQUIREMENT APPLIES CONTINUOUSLY, AND IS NOT LIMITED TO NORMAL WORKING HOURS.
9) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN. THE CONTRACTOR IS FINANCIALLY RESPONSIBLE FOR REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK ON THIS PROJECT.

SPECIAL INSPECTIONS, TESTING & STRUCTURAL OBSERVATION

1. STEEL FABRICATION SHALL BE DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED AS REQUIRED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. ALTERNATIVELY, SPECIAL INSPECTION OF MATERIALS, WELDING, AND FABRICATION PROCEDURES SHALL BE REQUIRED FOR FABRICATION BY AN UNAPPROVED FABRICATOR.
2. NO FIELD WELDING SHALL BE PERMITTED
3. NONDESTRUCTIVE TESTING IS REQUIRED FOR CJP GROOVE WELDS IN MATERIAL 5/16" THICK OR GREATER.
4. THE FOLLOWING SPECIAL INSPECTIONS SHALL BE REQUIRED PER CHAPTER 17 OF THE BUILDING CODE:
   - SPECIAL INSPECTION OF HIGH-STRENGTH BOLTING (WHEN APPLICABLE):
     - PERIODIC SPECIAL INSPECTION IF BOLTS ARE PRETENSIONED WITH MATCH-MARKING TECHNIQUES
     - CONTINUOUS SPECIAL INSPECTION OF ALL OTHER HIGH-STRENGTH BOLTING
   - PERIODIC SPECIAL INSPECTION OF PLACEMENT OF REINFORCING STEEL
   - PERIODIC SPECIAL INSPECTION OF ANCHOR BOLTS PRIOR TO AND DURING CONCRETE PLACEMENT
   - CONTINUOUS SPECIAL INSPECTION OF CONCRETE PLACEMENT
   - CONTINUOUS SPECIAL INSPECTION OF DRILLING OPERATIONS FOR PIER FOUNDATIONS
   - CONTINUOUS SPECIAL INSPECTION TO VERIFY LOCATION, PLUMBNESS, DIAMETER, AND LENGTH OF PIER FOUNDATIONS
   - SAMPLING & TESTING OF CONCRETE PER CHAPTER 17 OF THE BUILDING CODE TO VERIFY STRENGTH AND SLUMP
4. SPECIAL INSPECTION IS NOT REQUIRED FOR WORK OF A MINOR NATURE OR AS WARRANTED BY CONDITIONS IN THE JURISDICTION AS APPROVED BY THE BUILDING OFFICIAL. THUS, SPECIAL INSPECTION ITEMS ABOVE MAY BE WAIVED AS DEEMED APPROPRIATE BY THE BUILDING OFFICIAL.
5. NO STRUCTURAL OBSERVATION IS REQUIRED UNLESS NOTED IN CHAPTER 17 OF THE BUILDING CODE OR BY THE JURISDICTION.

DISCLAIMERS

1. ALL STRUCTURAL COMPONENTS TO BE CONNECTED TOGETHER SHALL BE COMPLETELY FIT UP ON THE GROUND OR OTHERWISE VERIFIED FOR COMPATIBILITY PRIOR TO LIFTING ANY COMPONENT INTO PLACE. REPAIRS REQUIRED DUE TO FIT-UP OR CONNECTION COMPATIBILITY PROBLEMS AFTER PARTIAL ERECTION ARE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.
2. SOME TELECOMMUNICATION STRUCTURES ARE SUSCEPTIBLE TO WIND-INDUCED OSCILLATIONS. OSCILLATIONS MAY OCCUR AT LOW OR MODERATE WIND SPEEDS AND MAY CAUSE STRUCTURAL DAMAGE. TIA PROVIDES NO PRACTICAL ANALYTICAL METHOD TO PREDICT AND PREVENT WIND-INDUCED STRUCTURAL OSCILLATIONS. VECTOR STRUCTURAL ENGINEERING RECOMMENDS FREQUENT MONITORING TO IDENTIFY WIND-INDUCED OSCILLATION AND REGULAR CONDITION ASSESSMENTS TO IDENTIFY FATIGUE CRACKING, LOOSE OR MISSING BOLTS, AND ANY OTHER STRUCTURAL DEFECTS. ANY OSCILLATION OR DEFECTS OBSERVED SHALL BE IMMEDIATELY REPORTED TO VECTOR STRUCTURAL ENGINEERING FOR FURTHER EVALUATION AND POSSIBLE REPAIRS OR MODIFICATIONS WHICH MAY BE REQUIRED AT THE OWNER'S EXPENSE.
3. WHERE EFFECTIVE PROJECTED AREAS (EPA) ARE USED, IT IS THE RESPONSIBILITY OF OTHERS TO VERIFY INSTALLED EQUIPMENT DOES NOT EXCEED LISTED EPA.

VECTOR ENGINEERS
651 W. Galena Park Blvd., Suite 101
Draper, UT 84020
(801) 990-1775
www.vectorse.com

STEELHEAD METAL & FAB, LLC
P.O. Box 3850 Salem OR, 97302
Ph: (503) 763-0114
Toll Free: 1-877-900-6789
Fax (503) 763-6280
www.steelheadmetals.com

DATE: 1/28/26	DESIGNED: MAR	DRAFTER: MAR

REVISIONS

REV	DATE	DESCRIPTION

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NOTES & SPECIFICATIONS

SF POLICE ACADEMY
SITE #: CCL05350
103'-0" MONOPOLE
350 AMBER DRIVE
SAN FRANCISCO, CA 94131
SAN FRANCISCO COUNTY

REGISTERED PROFESSIONAL ENGINEER
CASEY N. MILLARD
C 90109
CIVIL
STATE OF CALIFORNIA

01/28/2026

U1133.0725.261

N1

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DESIGN LOADING:
ANTENNA CL @ 100'-0" AGL:
- (3) QUINTEL QD668-2 PANEL ANTENNAS
- (3) ERICSSON AIR6419 B77G PANEL ANTENNAS
- (3) ERICSSON AIR6419 B77D PANEL ANTENNAS
- (3) QUINTEL QD6612-2
- (3) RRU 4490 B5/B12A
- (3) RRU 4478 B14
- (3) RRU 4890 B25/B66
- (3) DC9 SURGE SUPPRESSORS
- (1) SITEPRO1 RMVD12-NPNH MOUNT

ANTENNA CL @ 90'-0" AGL: SAME AS 100'-0" AGL

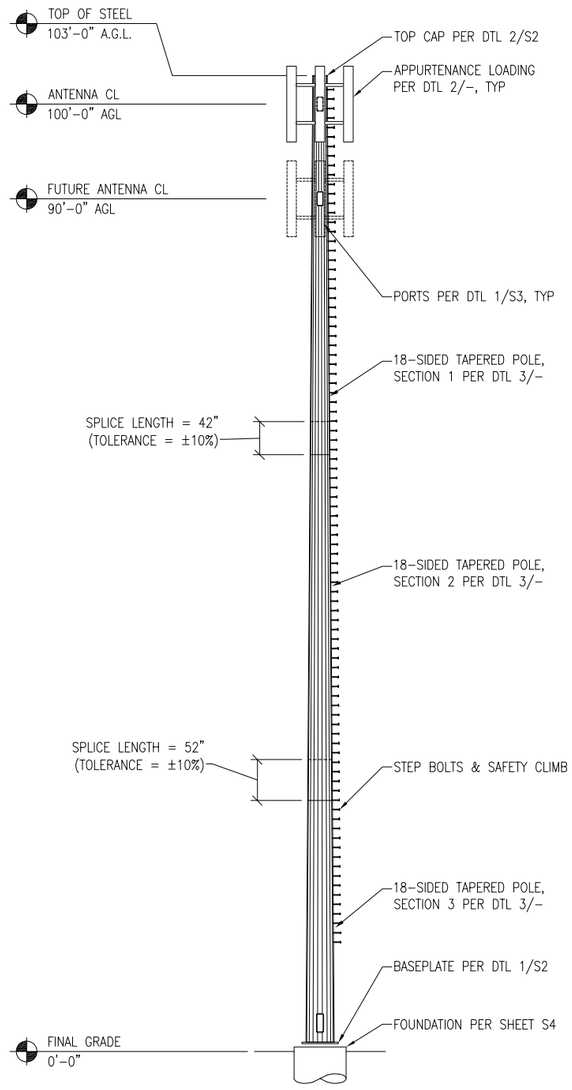
APPURTENANCES (2)
N.T.S.

MONOPOLE SECTION CHART[2]					
SECTION	LENGTH	ØTOP[4]	ØBOTTOM[4]	THICKNESS	WEIGHT[1,3]
1	40'-0"	18.00"	25.00"	3/16"	1.8 K
2	40'-0"	24.01"	31.01"	3/16"	2.3 K
3	29'-10"	29.88"	35.10"	3/16"	2.6 K

NOTES:
1. SECTION WEIGHT DOES NOT INCLUDE COATINGS, PORTS AND OTHER MINOR ATTACHMENTS.
2. LOWEST SECTION WEIGHT INCLUDES BASEPLATE WEIGHT.
3. DESIGN TAPER = 0.175 in/ft.
4. WEIGHTS LISTED IN THIS CHART ARE RAW STEEL WEIGHTS. FINAL WEIGHTS MAY BE UP TO 22% GREATER DUE TO GALVANIZING AND OTHER MISCELLANEOUS ITEMS.
5. DIAMETER OF POLE SECTIONS AT LAP SPLICES MAY BE ADJUSTED BY UP TO 0.06" TO ACCOUNT FOR THE THICKNESS OF COATINGS.

POLE SECTIONS (3)
N.T.S.

NOTE: ANTENNAS & PORTS ARE SHOWN FOR ILLUSTRATIVE PURPOSES & ARE NOT NECESSARILY SHOWN TO SCALE



ELEVATIONS (1)
N.T.S.

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651 W. Galena Park Blvd., Suite 101
Draper, UT 84020
(801) 990-1775
www.vectorse.com

STEELHEAD METAL & FAB, LLC
P.O. Box 3850 Salem OR, 97302
Ph: (503) 763-0114
Toll Free: 1-877-900-6789
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ELEVATION VIEWS

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SITE #: CCL05350
103'-0" MONOPOLE
350 AMBER DRIVE
SAN FRANCISCO, CA 94131
SAN FRANCISCO COUNTY

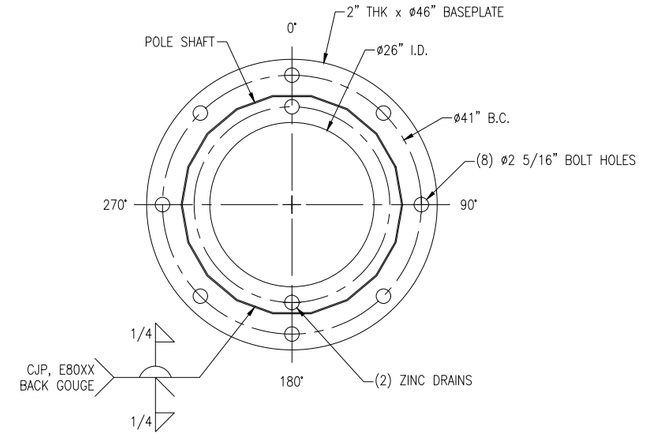
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CASEY N. MILLARD
C 90109
CIVIL
STATE OF CALIFORNIA

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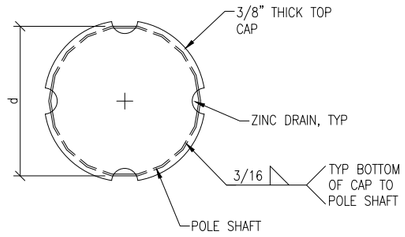
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BASEPLATE (1)
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TOP CAP (2)
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Draper, UT 84020
(801) 990-1775
www.vectorse.com

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P.O. Box 3850 Salem OR, 97302
Ph: (503) 763-0114
Toll Free: 1-877-900-6789
Fax (503) 763-6280
www.steelheadmetals.com

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DETAILS

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SAN FRANCISCO, CA 94131
SAN FRANCISCO COUNTY

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CASEY N. MILLARD
C 90109
CIVIL
STATE OF CALIFORNIA

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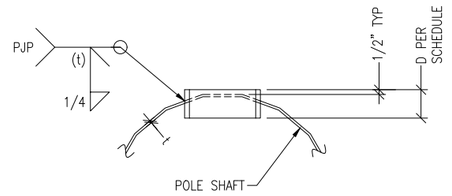
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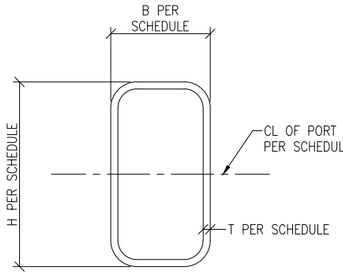
NOTE: SEE SCHEDULE FOR PORT QUANTITY & AZIMUTHS

NOTE: SEE DTL 3/S1 FOR POLE SHAFT THICKNESS, t



SECTION VIEW

NOTE: SEE GENERAL NOTES FOR REINFORCED PORT MATERIAL GRADE.



ELEVATION VIEW

PORT SCHEDULE					
CL ELEV.	PORT SIZE (B x H)	D	T	QTY	AZIMUTH(S)
100'-0"	6"x12"	2"	1/2"	3	120° SEPARATION
90'-0"	6"x12"	2"	1/2"	3	120° SEPARATION
3'-0"	12"x25"	3"	3/4"	2	180° SEPARATION

PORTS
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1

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651 W. Galena Park Blvd., Suite 101
Draper, UT 84020
(801) 990-1775
www.vectorse.com

STEELHEAD METAL & FAB, LLC
P.O. Box 3850 Salem OR, 97302
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SAN FRANCISCO, CA 94131
SAN FRANCISCO COUNTY

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CASEY N. MILLARD
C 90109
CIVIL
STATE OF CALIFORNIA

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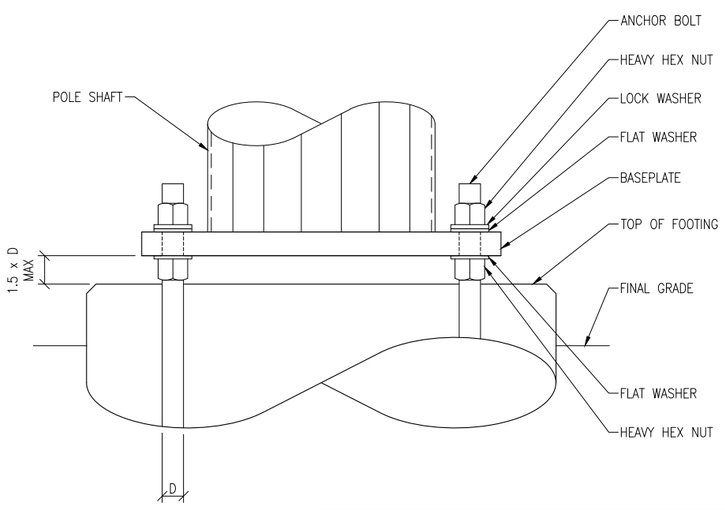
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FOUNDATION NOTES

1. FOUNDATION DESIGN IS BASED ON THE FOLLOWING GEOTECHNICAL REPORT:

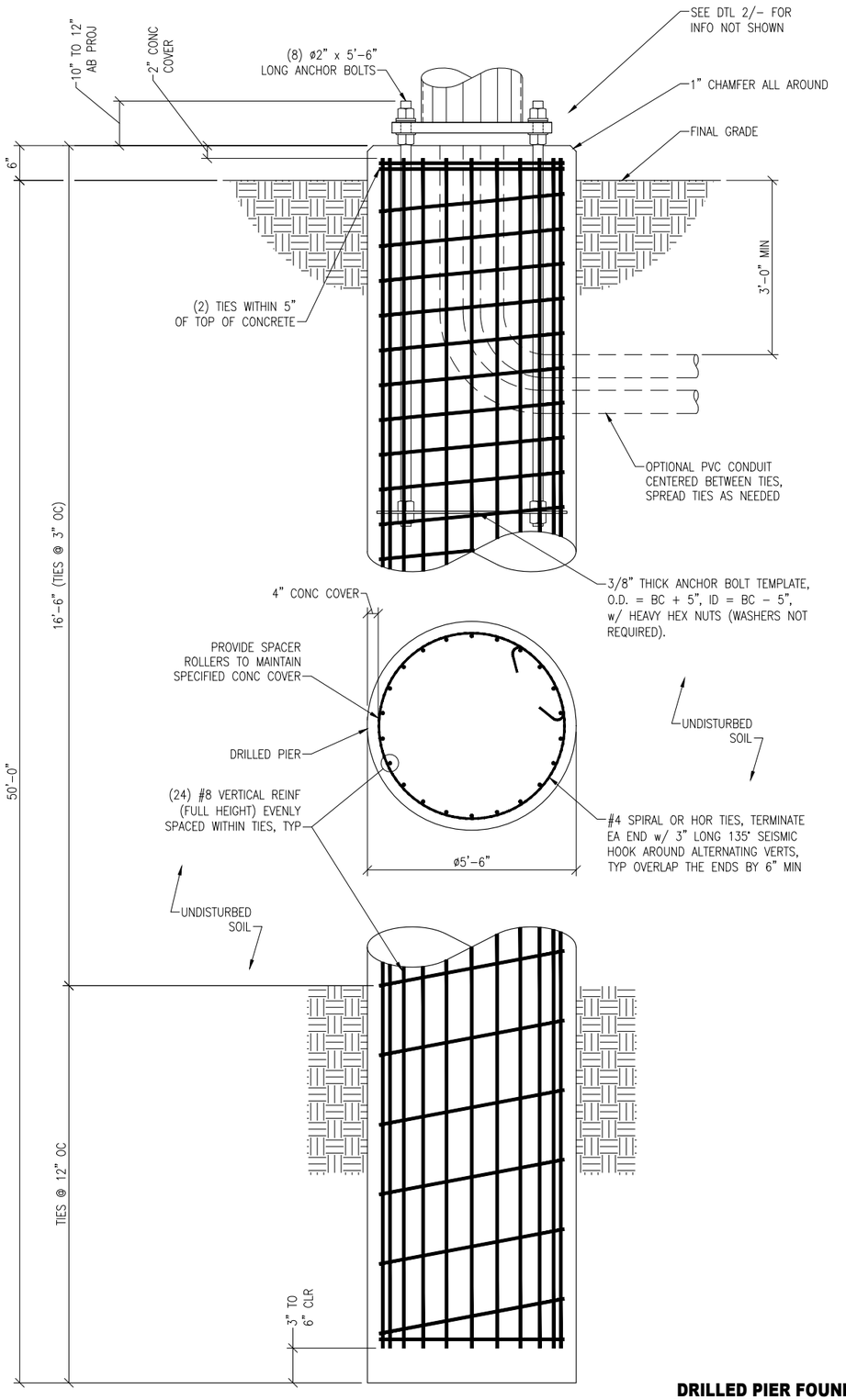
   SALEM ENGINEERING GROUP, INC
   REPORT: 5-225-1076
   DATE: JANUARY 19, 2026

2. ALL CONCRETE SHALL USE TYPE II PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. CONCRETE SHALL HAVE A MINIMUM OF 6% ENTRAINED AIR (WHERE FROST DEPTH > 0"). CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.50. CONCRETE SHALL HAVE A SLUMP OF 5" (±1") UNLESS OTHERWISE SPECIFIED IN THE GEOTECHNICAL REPORT. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318-19. FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 336, "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF DRILLED PIERS," LATEST EDITION.
3. REINFORCING STEEL SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A-615, GRADE 60. ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315, LATEST EDITION, UNLESS DETAILED OTHERWISE ON THIS DRAWING. CONTRACTOR SHALL USE STEEL WIRE TO HOLD REINFORCING BARS TOGETHER. IF WELDING REBAR IS PREFERRED, SUBSTITUTE A706 GR 60 DEFORMED BARS.
4. CONTRACTOR IS RESPONSIBLE FOR CHECKING AREA FOR UNDERGROUND FACILITIES PRIOR TO EXCAVATING ANY MATERIALS.
5. CONTRACTOR SHALL REFER TO SOILS REPORT FOR SITE CONDITIONS AND FURTHER CONSTRUCTION INFORMATION.
6. CONTRACTOR SHALL INSPECT AND REMOVE ALL DEBRIS FROM BOTTOM OF EXCAVATION.
7. CONTRACTOR SHALL VERIFY ANCHOR BOLT LAYOUT PRIOR TO AND IMMEDIATELY AFTER PLACING CONCRETE. ANCHOR BOLT LAYOUT IS CRITICAL FOR STRUCTURE INSTALLATION.
8. CONCRETE SHALL BE CONSOLIDATED USING VIBRATORY METHODS THROUGHOUT DEPTH OF FOUNDATION. VIBRATING LOWER DEPTHS MAY NOT BE ACCOMPLISHED BY TOUCHING REBAR CAGE WITH VIBRATOR.
9. DEPENDING ON SOIL CONDITIONS, CONTRACTOR SHOULD ANTICIPATE THE USE OF A FULL-LENGTH TEMPORARY CASING TO STABILIZE THE EXCAVATION. THE CASING SHALL BE WITHDRAWN DURING THE PLACEMENT OF CONCRETE IN THE EXCAVATED HOLE. CONCRETE SHALL NOT FREE FALL. CONCRETE MAY BE PLACED BELOW WATER USING TREMIE METHODS.
10. CONCRETE SHALL BE PLACED TO THE DEPTH INDICATED, AND THE ABOVE GRADE PORTION SHALL BE FORMED. THE REBAR CAGE, ANCHOR BOLTS, AND CONCRETE SHALL BE PLACED WITHIN 24 HOURS OF COMPLETING THE EXCAVATION. COLD JOINTS ARE NOT ALLOWED, UNO
11. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ADEQUATE CONCRETE COVERAGE OVER REINFORCING BARS. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL USE 3" CONCRETE COVER OVER REBAR. TOP OF FOOTING SHALL BE TROWEL LEVEL AND SMOOTH.
12. INSTALLATION OF FOUNDATION MUST BE OBSERVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER FIRM. GEOTECHNICAL ENGINEER TO PROVIDE A NOTICE OF INSPECTION FOR THE BUILDING INSPECTOR FOR REVIEW AND RECORD PURPOSES.
13. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR INFORMATION REGARDING INSTALLATION METHOD, REQUIRED INSTALLATION EQUIPMENT, AND ALL OTHER REQUIREMENTS RELATED TO THE INSTALLATION OF THE FOUNDATION.
14. STRUCTURE MAY BE ERECTED 3-DAYS AFTER FOUNDATION IS INSTALLED AND ONCE CONCRETE STRENGTH IS AT LEAST 4000 PSI.



N.T.S.

2



DRILLED PIER FOUNDATION

N.T.S.

1

VECTOR ENGINEERS
651 W. Galena Park Blvd., Suite 101
Draper, UT 84020
(801) 990-1775
www.vectorse.com

STEELHEAD METAL & FAB, LLC
P.O. Box 3850 Salem OR, 97302
Ph: (503) 763-0114
Toll Free: 1-877-900-6789
Fax (503) 763-6280
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DATE: 1/28/26	DESIGNED: MAR	DRAFTER: MAR

REVISIONS

REV	DATE	DESCRIPTION

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DRILLED PIER FOUNDATION

SF POLICE ACADEMY
SITE #: CCL05350
103'-0" MONOPOLE
350 AMBER DRIVE
SAN FRANCISCO, CA 94131
SAN FRANCISCO COUNTY

REGISTERED PROFESSIONAL ENGINEER
CASEY N. MILLARD
C 90109
CIVIL
STATE OF CALIFORNIA

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S4

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Exhibit D

Exhibit D

STRUCTURAL CALCULATIONS
for
SF POLICE ACADEMY (SITE#: CCL05350)

at
350 AMBER DRIVE
SAN FRANCISCO, CA 94131
for
AT&T
&
STEELHEAD METAL & FAB LLC



1/28/2026

BY: **CASEY N. MILLARD, P.E.**
PROFESSIONAL ENGINEER

PROJECT #: **U1133.0725.261**

DATE: **January 28, 2026**

DESIGNED BY MAR; CHECKED BY CNM

Note:
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PROJECT: SF POLICE ACADEMY

Design Criteria:

Code: Structural design is based on the California Building Code, 2025 Edition (2024 IBC) and the TIA-222-I standard.

Wind: Basic wind speed = 99 mph (3-second gust) per the ASCE 7-22 standard
Risk Category: III
Wind exposure: C
Kzt: 1

Ice: None per the ASCE 7-22 standard

Seismic: Seismic importance factor, I = 1.25
Risk Category: III
Mapped spectral response accelerations: S_S = 1.84g S_1 = 0.7g
Site class: D
Spectral response coefficients: S_{DS} = 1.3g S_{D1} = 1.38g
Seismic design category: D
Basic seismic-force-resisting-system: Telecom: Steel Pole
Seismic base shear, V = 6 k
Seismic response coefficient, Cs = 0.359
Response modification factor, R = 1.5
Analysis procedure: Equivalent Lateral Force

General Notes:

1 The contractor shall verify dimensions, conditions and elevations before starting work. The engineer shall be notified immediately if any discrepancies are found.
2 The typical notes and details shall apply in all cases unless specifically detailed elsewhere. Where no detail is shown, the construction shall be as shown for other similar work and as required by the building code.
3 These calculations are limited to the structural members shown in these calculations only.
4 The contractor shall be responsible for compliance with local construction safety orders. Approval of shop drawings by the architect or structural engineer shall not be construed as accepting this responsibility.
5 All structural framing members shall be adequately shored and braced during erection and until full lateral and vertical support is provided by adjoining members.

JOB NO.: U1133.0725.261

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PROJECT: SF POLICE ACADEMY

Structural Steel:

1 All structural steel code checks based on the AISC, 16th Edition per the TIA-222-I standard
2 All 18-sided, tapered shaft steel to be per ASTM A572 GR. 65, U.N.O.
3 The design length of slip splices is equal to 1.67 times the inside width of the base of the upper section. Slip splice length tolerance is equal to ± 10% of the design slip splice length.
4 All steel pipe to be per ASTM A53 GR. B (35 KSI), U.N.O.
5 All steel rectangular tubes (HSS) to be per ASTM A500 GR. B (46 KSI), U.N.O.
6 All other structural steel shapes & plates shall be per ASTM A36, U.N.O.
7 All anchor bolts shall be per ASTM F1554 GR. 55, U.N.O.
8 All bolts for steel-to-steel connections shall be per ASTM F3125 GR. A325 U.N.O.
9 All bolted connections shall be tightened per the "turn-of-nut" method as defined by AISC.
10 All welding shall be performed by certified welders in accordance with the latest edition of the American Welding Society (AWS) D1.1. Utilize minimum E70XX low-hydrogen electrode U.N.O. or where higher strength electrode is required by AWS D1.1
11 All steel surfaces shall be galvanized in accordance with ASTM A123 and ASTM F2329 standards, thoroughly coated with a zinc-rich primer, or otherwise protected as noted on the structural drawings.

Foundation / Concrete:

1 All concrete mixing, placement, forming, and reinforcing installation shall be performed in accordance with the requirements of “Building Code Requirements for Reinforced Concrete”, ACI 318-19. Foundation installation shall be in accordance with the requirements of "Standard Specifications for the Construction of Drilled Piers", ACI 336, latest edition
2 All concrete shall have a minimum compressive strength of 4000 psi at 28 days.
3 Cement for all concrete shall be Type II with 6% (+/- 1.5%) entrained air. Maximum aggregate size shall be 3/4".
4 Reinforcing steel shall be per ASTM A615 Gr. 60, U.N.O.
6 Foundation design is based on presumptive soil parameters. Vector Structural Engineering, LLC strongly recommends independent soils testing be performed by a licensed geotechnical engineer to verify soil bearing capacities, slope stability, and any other related soil parameters, as required.

JOB NO.: U1133.0725.261

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PROJECT: SF POLICE ACADEMY

ASCE 7-22
Method 1

Seismic Base Shear Calculations:

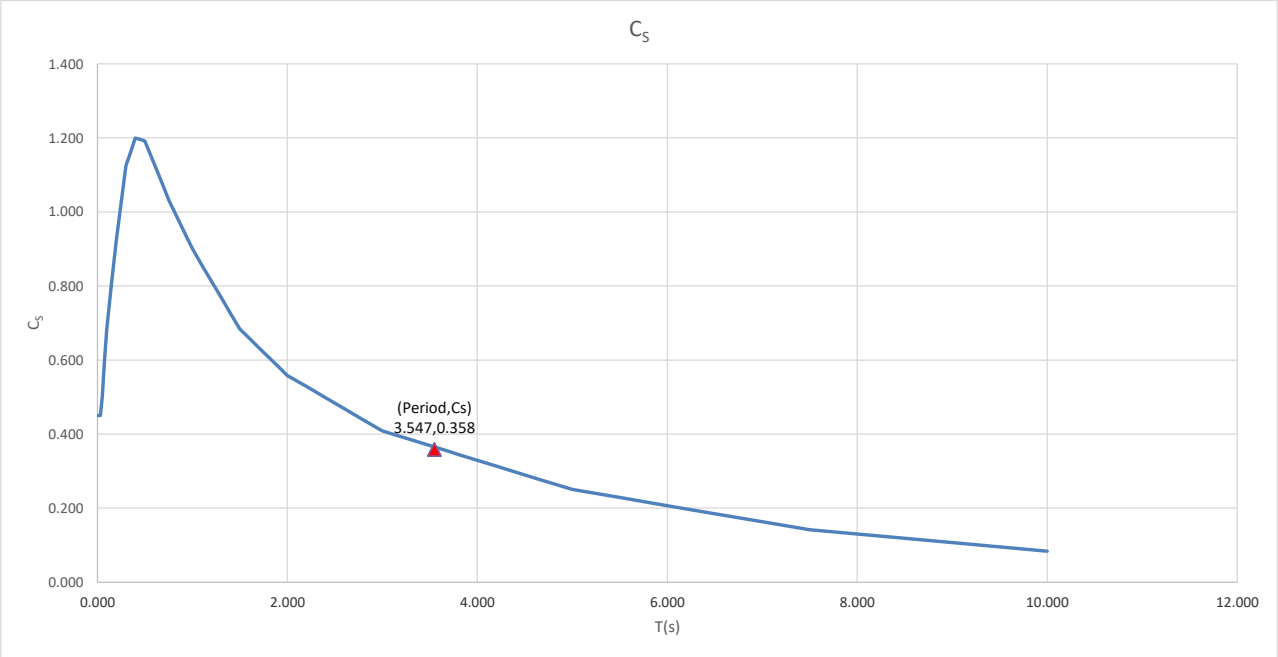
Seismic Parameters:

Risk Category=	III		S_s =	1.840	g	S_{DS} =	1.300	g
Seismic Design Category:	D		S_1 =	0.700	g	S_{D1} =	1.380	g
Importance, I =	1.25		S_{MS} =	1.950	g			
Site Class:	D		SM1 =	2.070	g			
R =	1.5		Sa(g) =	0.430				
T_L =	12							

Seismic Base Shear:

Structure Type =	Telecom: Steel Pole							
Period Type =	Monopole Period							
h =	102.0	ft	W_u =	5.31	k	f_1 =	0.28	Hz
E =	29000	ksi	W_t =	16.7	k	T=	3.55	sec.
I_{avg} =	1369	in^4	W_L =	11.4	k	k_e=	2.00	
C_s=	0.359							
Seismic Shear, $V_{s(final)}$ =	6.0	k	**ratio =**	0.62				
Wind Shear =	9.6	k						

Wind Controls, Seismic Analysis Still Required



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PROJECT: SF POLICE ACADEMY

Equivalent Lateral Force:

Discrete Appurtenances:

Label	Height AGL, h_z [ft]	Weight, w_z [lb]	$w_z h_z^{ke}$	F_{sz} [lb]
(3) Quintel QD668-2	100.0	167	1665000	96.7
(6) Ericsson Air Stacked	100.0	484	4842000	281.3
(3) Quintel QD6612-2	100.0	363	3627000	210.7
(3) RRU 4490	100.0	210	2100000	122.0
(3) RRU 4478	100.0	180	1800000	104.6
(3) RRU 4890	100.0	209	2085000	121.1
(3) Surge Suppressor	100.0	79	786000	45.7
(1) RMVD-12	100.0	2081	20810000	1209.1
(3) Quintel QD668-2	100.0	167	1665000	96.7
(6) Ericsson Air Stacked	100.0	484	4842000	281.3
(3) Quintel QD6612-2	100.0	363	3627000	210.7
(3) RRU 4490	100.0	210	2100000	122.0
(3) RRU 4478	100.0	180	1800000	104.6
(3) RRU 4890	100.0	209	2085000	121.1
(3) Surge Suppressor	100.0	79	786000	45.7
(1) RMVD-12	100.0	2081	20810000	1209.1

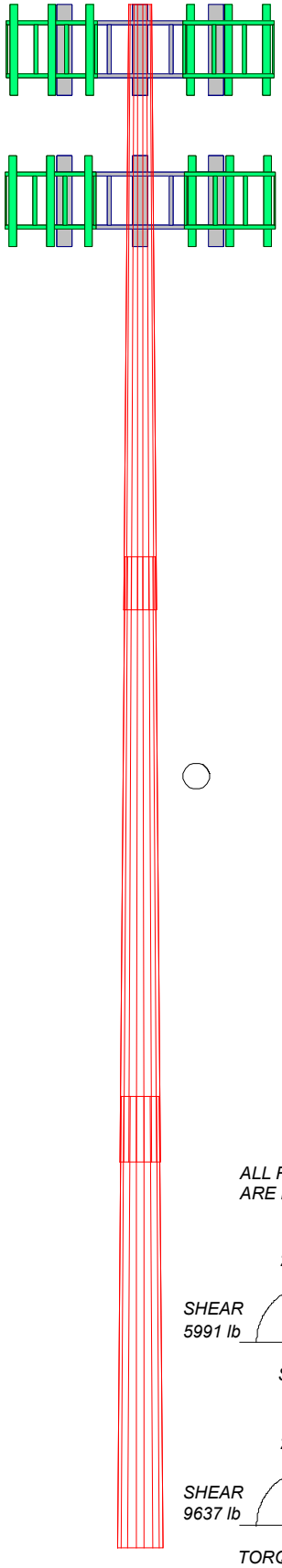
Linear Appurtenances:

Label	z [ft]	w_z [lb]	$w_z h_z^{ke}$	F_{sz} [lb]
Coax	92.9	320.9	2767067	160.8
Coax	78.6	493.7	3047930	177.1
Coax	64.3	493.7	2040350	118.5
Coax	50.0	493.7	1234286	71.7
Coax	35.7	493.7	629738	36.6
Coax	21.4	493.7	226706	13.2
Coax	7.1	493.7	25190	1.5

Tapered Pole:

Label	z [ft] AGL	w_z [lb]	$w_z h_z^{ke}$	F_{sz} [lb]
Tapered 1	96.3	573.2	5319800	309.1
Tapered 1	83.0	573.2	3949102	229.4
Tapered 1	69.7	573.2	2782225	161.6
Tapered 2	59.8	736.4	2636385	153.2
Tapered 2	46.5	736.4	1592313	92.5
Tapered 2	33.2	736.4	810077	47.1
Tapered 3	25.9	650.4	435003	25.3
Tapered 3	15.9	650.4	164779	9.6
Tapered 3	6.0	650.4	23199	1.3

Section	1	2	3
Length (ft)	40.00	40.00	29.83
Number of Sides	18	18	18
Thickness (in)	0.1875	0.1875	0.1880
Socket Length (ft)	3.50	4.33	
Top Dia (in)	18.0000	24.0125	29.8798
Bot Dia (in)	25.0000	31.0125	35.1000
Grade		A572-65	
Weight (lb)	1726.4	2213.4	1956.5



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	100	Tapered 1 seismic	96.3
		Coax seismic	92.9
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	90
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	100	Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	100	Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	90
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	100	Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	90
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	100	Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	90
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	100	RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	90
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	100	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	90
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	100	Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	100	Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	90
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	100	Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	90
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	100	Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	90
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	100	Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	90
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	100	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	90
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	100	Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	100	Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	90
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	100	Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	90
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	100	Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	90
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	100	Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	90
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	100	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	90
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	100	Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	100	Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	100	Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	90
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	100	Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	90
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	100	Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	90
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	100	Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	90
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	100	Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	90
(3) Quintel QD668-2 seismic	100	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	90
(6) Ericsson Air Stacked seismic	100		
(3) Quintel QD6612-2 seismic	100	Tapered 1 seismic	83
(3) RRU 4490 seismic	100	Coax seismic	78.6
(3) RRU 4478 seismic	100	Tapered 1 seismic	69.7
(3) RRU 4890 seismic	100	Coax seismic	64.3
(3) Surge Suppressor seismic	100	Tapered 2 seismic	59.8
(1) RMVD-12 seismic	100	Coax seismic	50
(3) Quintel QD668-2 seismic	100	Tapered 2 seismic	46.5
(6) Ericsson Air Stacked seismic	100	Coax seismic	35.7
(3) Quintel QD6612-2 seismic	100	Tapered 2 seismic	33.2
(3) RRU 4490 seismic	100	Tapered 3 seismic	25.9
(3) RRU 4478 seismic	100	Coax seismic	21.4
(3) RRU 4890 seismic	100	Tapered 3 seismic	15.9
(3) Surge Suppressor seismic	100	Coax seismic	7.1
(1) RMVD-12 seismic	100	Tapered 3 seismic	6

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

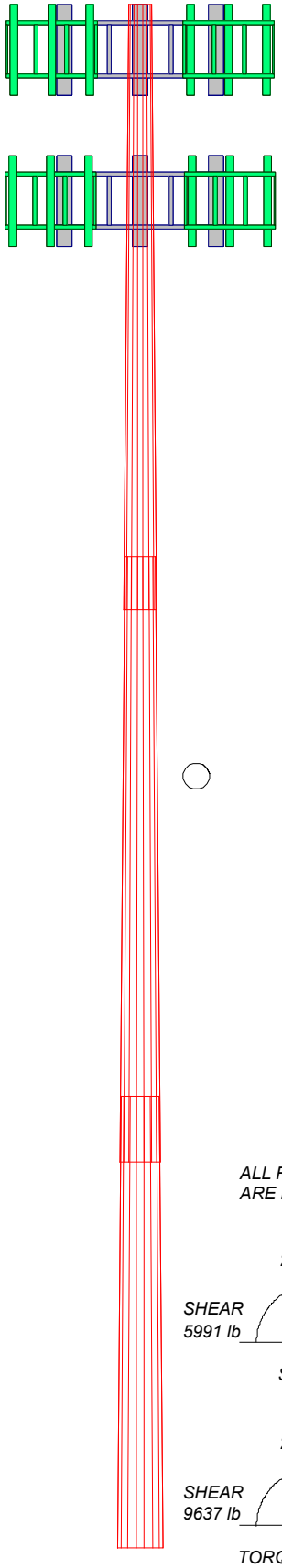
1. Tower is located in San Francisco County, California.
2. Tower designed for Exposure C to the TIA-222-I Standard.
3. Tower designed for a 99 mph basic wind in accordance with the TIA-222-I Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category III.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 97.6%

Vector Structural Engineering
651 W Galena Park Blvd
Draper, UT 84020
Phone: (801) 990-1775
FAX: (801) 990-1776

Job: **SF Police Academy**			
Project: **U1133.0725.261**			
Client: Steelhead	Drawn by: mririe	App'd:	
Code: TIA-222-I	Date: 01/27/26	Scale: NTS	
Path:		Dwg No. E-1	

Section	1	2	3
Length (ft)	40.00	40.00	29.83
Number of Sides	18	18	18
Thickness (in)	0.1875	0.1875	0.1880
Socket Length (ft)	3.50	4.33	
Top Dia (in)	18.0000	24.0125	29.8798
Bot Dia (in)	25.0000	31.0125	35.1000
Grade	A572-65		
Weight (lb)	1726.4	2213.4	1956.5

Total Weight: 5896.3



MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in San Francisco County, California.
2. Tower designed for Exposure C to the TIA-222-I Standard.
3. Tower designed for a 99 mph basic wind in accordance with the TIA-222-I Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category III.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 97.6%

ALL REACTIONS ARE FACTORED

AXIAL
24369 lb

SHEAR
5991 lb

MOMENT
615386 lb-ft

SEISMIC

AXIAL
20026 lb

SHEAR
9637 lb

MOMENT
798216 lb-ft

TORQUE 1251 lb-ft
REACTIONS - 99 mph WIND

Vector Structural Engineering
651 W Galena Park Blvd
Draper, UT 84020
Phone: (801) 990-1775
FAX: (801) 990-1776

Job:	***SF Police Academy***		
Project:	***U1133.0725.261***		
Client: Steelhead	Drawn by: mririe		App'd:
Code: TIA-222-I	Date: 01/28/26		Scale: NTS
Path:			Dwg No. E-1

Tower Input Data

The tower is a monopole.
This tower is designed using the TIA-222-I standard.
The following design criteria apply:

Tower is located in San Francisco County, California.
Tower base elevation above sea level: 561.00 ft.
Basic wind speed of 99 mph is used.
Risk Category III.
Exposure Category C.
Crest Height: 0.00 ft.
Deflections calculated using a wind speed of 60 mph.
Fatigue along-wind analysis loads are applied.
Non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Assume Legs Pinned	√	Calculate Redundant Bracing Forces
	Consider Moments - Horizontals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Consider Moments - Diagonals	√	Use Clear Spans For Wind Area		SR Leg Bolts Resist Compression
	Use Moment Magnification	√	Use Clear Spans For KL/r	√	All Leg Panels Have Same Allowable
√	Use Code Stress Ratios	√	Retension Guys To Initial Tension		Offset Girt At Foundation
√	Use Code Safety Factors - Guys	√	Bypass Mast Stability Checks		Consider Feed Line Torque
	Escalate Ice	√	Use Azimuth Dish Coefficients		Include Angle Block Shear Check
	Always Use Max Kz	√	Project Wind Area of Appurtenances		Use TIA-222-H Bracing Resist. Exemption
	Kz In Exposure D Hurricane Region		Alternative Appurt. EPA Calculation		Use TIA-222-H Tension Splice Exemption
√	Include Bolts In Member Capacity	√	Autocalc Torque Arm Areas		Poles
√	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Include Shear-Torsion Interaction
√	Secondary Horizontal Braces Leg		Sort Capacity Reports By Component		Always Use Sub-Critical Flow
	Use Diamond Inner Bracing (4 Sided)	√	Triangulate Diamond Inner Bracing		Use Top Mounted Sockets
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Pole Without Linear Attachments
	SR Members Are Concentric		Ignore KL/ry For 60 Deg. Angle Legs		Pole With Shroud Or No Appurtenances
	Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules		Outside and Inside Corner Radii Are Known
	Use Special Wind Profile				Use Fatigue Analysis Exemption for Gh

Tapered Pole Section Geometry

Section	*Elevation* *ft*	*Section Length* *ft*	*Splice Length* *ft*	*Number of Sides*	*Top Diameter* *in*	*Bottom Diameter* *in*	*Wall Thickness* *in*	*Bend Radius* *in*	*Pole Grade*
L1	103.00-63.00	40.00	3.50	18	18.0000	25.0000	0.1875	0.7500	A572-65 (65 ksi)
L2	63.00-26.50	40.00	4.33	18	24.0125	31.0125	0.1875	0.7500	A572-65 (65 ksi)
L3	26.50-1.00	29.83		18	29.8798	35.1000	0.1880	0.7520	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	18.2488	10.6007	424.9328	6.3234	9.1440	46.4712	850.4248	5.3013	2.8380	15.136
	25.3567	14.7665	1148.5693	8.8084	12.7000	90.4385	2298.6500	7.3847	4.0700	21.707
L2	24.9760	14.1789	1016.8207	8.4579	12.1983	83.3572	2034.9793	7.0908	3.8962	20.78
	31.4620	18.3447	2202.1906	10.9429	15.7544	139.7830	4407.2789	9.1741	5.1282	27.35
L3	31.0811	17.7174	1973.3749	10.5406	15.1789	130.0077	3949.3465	8.8604	4.9280	26.213
	35.6125	20.8324	3207.9413	12.3938	17.8308	179.9101	6420.1036	10.4182	5.8467	31.1

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 103.00-63.00				1	1	1			
L2 63.00-26.50				1	1	1			
L3 26.50-1.00				1	1	1			

Monopole Base Plate Data

Base Plate Data	
Base plate is square	
Base plate is grouted	
Anchor bolt grade	F1554-55
Anchor bolt size	2.0000 in
Number of bolts	8
Embedment length	60.0000 in
f'_c	4 ksi
Grout space	3.0000 in
Base plate grade	A572-50
Base plate thickness	2.0000 in
Bolt circle diameter	41.0000 in
Outer diameter	46.0000 in
Inner diameter	26.0000 in
Base plate type	Plain Plate

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
1 5/8 Coax (Enclosed)	C	No	Yes	Inside Pole	100.00 - 1.00	24	No Ice	0.00	0.72
1 5/8 Coax (Enclosed)	C	No	Yes	Inside Pole	90.00 - 1.00	24	No Ice	0.00	0.72

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
L1	103.00-63.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1105.92
L2	63.00-26.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	1261.44
L3	26.50-1.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	881.28

User Defined Loads - Seismic

Description	Elevation ft	Offset From Centroid ft	Azimuth Angle °	E_v lb	E_{hx} lb	E_{hz} lb	E_h lb
(3) Quintel QD668-2 seismic	100.00	0.00	0.0000	43.30	0.00	0.00	96.70
(6) Ericsson Air Stacked seismic	100.00	0.00	0.0000	125.90	0.00	0.00	281.30
(3) Quintel QD6612-2 seismic	100.00	0.00	0.0000	94.30	0.00	0.00	210.70
(3) RRU 4490 seismic	100.00	0.00	0.0000	54.60	0.00	0.00	122.00
(3) RRU 4478 seismic	100.00	0.00	0.0000	46.80	0.00	0.00	104.60
(3) RRU 4890 seismic	100.00	0.00	0.0000	54.20	0.00	0.00	121.10
(3) Surge Suppressor seismic	100.00	0.00	0.0000	20.40	0.00	0.00	45.70
(1) RMVD-12 seismic	100.00	0.00	0.0000	541.10	0.00	0.00	1209.10
(3) Quintel QD668-2 seismic	100.00	0.00	0.0000	43.30	0.00	0.00	96.70
(6) Ericsson Air Stacked seismic	100.00	0.00	0.0000	125.90	0.00	0.00	281.30
(3) Quintel QD6612-2 seismic	100.00	0.00	0.0000	94.30	0.00	0.00	210.70
(3) RRU 4490 seismic	100.00	0.00	0.0000	54.60	0.00	0.00	122.00
(3) RRU 4478 seismic	100.00	0.00	0.0000	46.80	0.00	0.00	104.60
(3) RRU 4890 seismic	100.00	0.00	0.0000	54.20	0.00	0.00	121.10
(3) Surge Suppressor seismic	100.00	0.00	0.0000	20.40	0.00	0.00	45.70
(1) RMVD-12 seismic	100.00	0.00	0.0000	541.10	0.00	0.00	1209.10
Coax seismic	92.90	0.00	0.0000	83.40	0.00	0.00	160.80
Coax seismic	78.60	0.00	0.0000	128.40	0.00	0.00	177.10
Coax seismic	64.30	0.00	0.0000	128.40	0.00	0.00	118.50
Coax seismic	50.00	0.00	0.0000	128.40	0.00	0.00	71.70
Coax seismic	35.70	0.00	0.0000	128.40	0.00	0.00	36.60
Coax seismic	21.40	0.00	0.0000	128.40	0.00	0.00	13.20
Coax seismic	7.10	0.00	0.0000	128.40	0.00	0.00	1.50
Tapered 1 seismic	96.30	0.00	0.0000	149.00	0.00	0.00	309.10
Tapered 1 seismic	83.00	0.00	0.0000	149.00	0.00	0.00	229.40
Tapered 1 seismic	69.70	0.00	0.0000	149.00	0.00	0.00	161.60
Tapered 2 seismic	59.80	0.00	0.0000	191.50	0.00	0.00	153.20
Tapered 2 seismic	46.50	0.00	0.0000	191.50	0.00	0.00	92.50
Tapered 2 seismic	33.20	0.00	0.0000	191.50	0.00	0.00	47.10
Tapered 3 seismic	25.90	0.00	0.0000	169.10	0.00	0.00	25.30
Tapered 3 seismic	15.90	0.00	0.0000	169.10	0.00	0.00	9.60
Tapered 3 seismic	6.00	0.00	0.0000	169.10	0.00	0.00	1.30

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	11.45	8.22	55.50
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	4.15	2.80	80.70
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	4.15	2.80	80.70
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	13.58	8.22	120.90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	A	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.68	1.22	70.00
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	A	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.02	1.25	60.00
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	A	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.70	1.25	69.50
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb) ****	A	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	1.21	1.21	26.20
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	B	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	11.45	8.22	55.50
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	B	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	4.15	2.80	80.70
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	B	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	4.15	2.80	80.70
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	B	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	13.58	8.22	120.90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	B	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.68	1.22	70.00
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	B	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.02	1.25	60.00
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	B	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.70	1.25	69.50
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb) ****	B	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	1.21	1.21	26.20
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	C	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	11.45	8.22	55.50
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	C	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	4.15	2.80	80.70
Ericsson Air 6419 B77D	C	From Face	2.00	0.0000	100.00	No Ice	4.15	2.80	80.70

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
(28.3"x16.1"x7.9", 66.1lb) w/ MP			0.00 0.00						
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	C	From Face	2.00 0.00 0.00	0.0000	100.00	No Ice	13.58	8.22	120.90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	C	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.68	1.22	70.00
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	C	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.02	1.25	60.00
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	C	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	2.70	1.25	69.50
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	C	From Face	1.00 0.00 0.00	0.0000	100.00	No Ice	1.21	1.21	26.20
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors ****	C	None		0.0000	100.00	No Ice	21.51	20.57	2081.00
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	11.45	8.22	55.50
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	4.15	2.80	80.70
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	4.15	2.80	80.70
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	A	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	13.58	8.22	120.90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	A	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.68	1.22	70.00
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	A	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.02	1.25	60.00
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	A	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.70	1.25	69.50
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb) ****	A	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	1.21	1.21	26.20
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	B	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	11.45	8.22	55.50
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	B	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	4.15	2.80	80.70
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	B	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	4.15	2.80	80.70
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	B	From Face	2.00 0.00	0.0000	90.00	No Ice	13.58	8.22	120.90

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			0.00						
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	B	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.68	1.22	70.00
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	B	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.02	1.25	60.00
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	B	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.70	1.25	69.50
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	B	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	1.21	1.21	26.20
****									
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	C	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	11.45	8.22	55.50
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	C	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	4.15	2.80	80.70
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	C	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	4.15	2.80	80.70
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	C	From Face	2.00 0.00 0.00	0.0000	90.00	No Ice	13.58	8.22	120.90
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	C	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.68	1.22	70.00
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	C	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.02	1.25	60.00
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	C	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	2.70	1.25	69.50
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	C	From Face	1.00 0.00 0.00	0.0000	90.00	No Ice	1.21	1.21	26.20
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	C	None		0.0000	90.00	No Ice	21.51	20.57	2081.00

Tower Pressures - No Ice

$G_H = 0.950$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	82.16	1.204	28	72.676	A	0.000	72.676	72.676	100.00	0.000	0.000
103.00-63.00					B	0.000	72.676		100.00	0.000	0.000
					C	0.000	72.676		100.00	0.000	0.000
L2 63.00-26.50	44.44	1.062	25	85.833	A	0.000	85.833	85.833	100.00	0.000	0.000
					B	0.000	85.833		100.00	0.000	0.000
					C	0.000	85.833		100.00	0.000	0.000
L3 26.50-1.00	13.46	0.850	20	70.862	A	0.000	70.862	70.862	100.00	0.000	0.000
					B	0.000	70.862		100.00	0.000	0.000
					C	0.000	70.862		100.00	0.000	0.000

Tower Pressure - Service

$G_H = 0.950$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	82.16	1.204	9	72.676	A	0.000	72.676	72.676	100.00	0.000	0.000
103.00-63.00					B	0.000	72.676		100.00	0.000	0.000
					C	0.000	72.676		100.00	0.000	0.000
L2 63.00-26.50	44.44	1.062	8	85.833	A	0.000	85.833	85.833	100.00	0.000	0.000
					B	0.000	85.833		100.00	0.000	0.000
					C	0.000	85.833		100.00	0.000	0.000
L3 26.50-1.00	13.46	0.850	7	70.862	A	0.000	70.862	70.862	100.00	0.000	0.000
					B	0.000	70.862		100.00	0.000	0.000
					C	0.000	70.862		100.00	0.000	0.000

Tower Pressure - Along-Wind Gust

$G_H = 1.000$

Section Elevation ft	z ft	K_Z	q_{wg} psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
L1	82.16	1.000	5	72.676	A	0.000	72.676	72.676	100.00	0.000	0.000
103.00-63.00					B	0.000	72.676		100.00	0.000	0.000
					C	0.000	72.676		100.00	0.000	0.000
L2 63.00-26.50	44.44	1.000	5	85.833	A	0.000	85.833	85.833	100.00	0.000	0.000
					B	0.000	85.833		100.00	0.000	0.000
					C	0.000	85.833		100.00	0.000	0.000
L3 26.50-1.00	13.46	1.000	5	70.862	A	0.000	70.862	70.862	100.00	0.000	0.000
					B	0.000	70.862		100.00	0.000	0.000
					C	0.000	70.862		100.00	0.000	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	28	1	1	72.676	1415.20	35.38	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	25	1	1	85.833	1469.29	40.25	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	20	1	1	70.862	975.68	38.26	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	190834.97 lb-ft	3860.17		

Tower Forces - No Ice - Wind 45 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	28	1	1	72.676	1415.20	35.38	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	25	1	1	85.833	1469.29	40.25	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	20	1	1	70.862	975.68	38.26	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	190834.97 lb-ft	3860.17		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	28	1	1	72.676	1415.20	35.38	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	25	1	1	85.833	1469.29	40.25	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	20	1	1	70.862	975.68	38.26	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	190834.97 lb-ft	3860.17		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	28	1	1	72.676	1415.20	35.38	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	25	1	1	85.833	1469.29	40.25	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	20	1	1	70.862	975.68	38.26	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	190834.97 lb-ft	3860.17		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	9	1	1	72.676	465.10	11.63	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	8	1	1	85.833	482.87	13.23	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	7	1	1	70.862	320.65	12.57	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	62717.02 lb-ft	1268.63		

Tower Forces - Service - Wind 45 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	9	1	1	72.676	465.10	11.63	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	8	1	1	85.833	482.87	13.23	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L3 26.50-1.00	881.28	1956.51	A	1	0.73	7	1	1	70.862	320.65	12.57	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	62717.02 lb-ft	1268.63		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	9	1	1	72.676	465.10	11.63	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	8	1	1	85.833	482.87	13.23	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	7	1	1	70.862	320.65	12.57	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	62717.02 lb-ft	1268.63		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.73	9	1	1	72.676	465.10	11.63	C
103.00-63.00			B	1	0.73		1	1	72.676			
			C	1	0.73		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	8	1	1	85.833	482.87	13.23	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	7	1	1	70.862	320.65	12.57	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	62717.02 lb-ft	1268.63		

Tower Forces - Along-Wind Gust - Wind Normal To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_{wg} psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.864	5	1	1	72.676	314.00	7.85	C
103.00-63.00			B	1	0.864		1	1	72.676			
			C	1	0.864		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	5	1	1	85.833	313.29	8.58	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	5	1	1	70.862	258.65	10.14	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	42315.33 lb-ft	885.94		

Tower Forces - Along-Wind Gust - Wind 45 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_{wg} psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.864	5	1	1	72.676	314.00	7.85	C
103.00-63.00			B	1	0.864		1	1	72.676			
			C	1	0.864		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	5	1	1	85.833	313.29	8.58	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	5	1	1	70.862	258.65	10.14	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	42315.33 lb-ft	885.94		

Tower Forces - Along-Wind Gust - Wind 60 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_{wg} psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.864	5	1	1	72.676	314.00	7.85	C
103.00-63.00			B	1	0.864		1	1	72.676			
			C	1	0.864		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	5	1	1	85.833	313.29	8.58	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	5	1	1	70.862	258.65	10.14	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	42315.33 lb-ft	885.94		

Tower Forces - Along-Wind Gust - Wind 90 To Face

Section Elevation ft	Add Weight lb	Self Weight lb	Face	e	C_F	q_{wg} psf	D_F	D_R	A_E ft²	F lb	w plf	Ctrl. Face
L1	1105.92	1726.39	A	1	0.864	5	1	1	72.676	314.00	7.85	C
103.00-63.00			B	1	0.864		1	1	72.676			
			C	1	0.864		1	1	72.676			
L2	1261.44	2213.42	A	1	0.73	5	1	1	85.833	313.29	8.58	C
63.00-26.50			B	1	0.73		1	1	85.833			
			C	1	0.73		1	1	85.833			
L3 26.50-1.00	881.28	1956.51	A	1	0.73	5	1	1	70.862	258.65	10.14	C
			B	1	0.73		1	1	70.862			
			C	1	0.73		1	1	70.862			
Sum Weight:	3248.64	5896.31						OTM	42315.33 lb-ft	885.94		

Discrete Appurtenance Pressures - No Ice $G_H = 1.000$

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft²	C_AA_C Side ft²
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	300.0000	55.50	-2.40	-1.39	100.00	1.254	29	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.40	-1.39	100.00	1.254	29	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.40	-1.39	100.00	1.254	29	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	300.0000	120.90	-2.40	-1.39	100.00	1.254	29	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	300.0000	70.00	-1.53	-0.89	100.00	1.254	29	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	300.0000	60.00	-1.53	-0.89	100.00	1.254	29	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	300.0000	69.50	-1.53	-0.89	100.00	1.254	29	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	300.0000	26.20	-1.53	-0.89	100.00	1.254	29	1.21	1.21
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	60.0000	55.50	2.40	-1.39	100.00	1.254	29	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.40	-1.39	100.00	1.254	29	4.15	2.80

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.40	-1.39	100.00	1.254	29	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	60.0000	120.90	2.40	-1.39	100.00	1.254	29	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	60.0000	70.00	1.53	-0.89	100.00	1.254	29	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	60.0000	60.00	1.53	-0.89	100.00	1.254	29	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	60.0000	69.50	1.53	-0.89	100.00	1.254	29	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	60.0000	26.20	1.53	-0.89	100.00	1.254	29	1.21	1.21
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	180.0000	55.50	0.00	2.77	100.00	1.254	29	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.77	100.00	1.254	29	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.77	100.00	1.254	29	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	180.0000	120.90	0.00	2.77	100.00	1.254	29	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	180.0000	70.00	0.00	1.77	100.00	1.254	29	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	180.0000	60.00	0.00	1.77	100.00	1.254	29	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	180.0000	69.50	0.00	1.77	100.00	1.254	29	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	180.0000	26.20	0.00	1.77	100.00	1.254	29	1.21	1.21
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	0.0000	2081.00	0.00	0.00	100.00	1.254	29	21.51	20.57
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	300.0000	55.50	-2.46	-1.42	90.00	1.227	29	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.46	-1.42	90.00	1.227	29	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.46	-1.42	90.00	1.227	29	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	300.0000	120.90	-2.46	-1.42	90.00	1.227	29	13.58	8.22
Ericsson RRU 4490 B5/B12A	300.0000	70.00	-1.60	-0.92	90.00	1.227	29	2.68	1.22

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
(20.6"x15.6"x7", 70 lbs)									
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	300.0000	60.00	-1.60	-0.92	90.00	1.227	29	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	300.0000	69.50	-1.60	-0.92	90.00	1.227	29	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	300.0000	26.20	-1.60	-0.92	90.00	1.227	29	1.21	1.21
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	60.0000	55.50	2.46	-1.42	90.00	1.227	29	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.46	-1.42	90.00	1.227	29	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.46	-1.42	90.00	1.227	29	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	60.0000	120.90	2.46	-1.42	90.00	1.227	29	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	60.0000	70.00	1.60	-0.92	90.00	1.227	29	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	60.0000	60.00	1.60	-0.92	90.00	1.227	29	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	60.0000	69.50	1.60	-0.92	90.00	1.227	29	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	60.0000	26.20	1.60	-0.92	90.00	1.227	29	1.21	1.21
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	180.0000	55.50	0.00	2.84	90.00	1.227	29	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.84	90.00	1.227	29	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.84	90.00	1.227	29	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	180.0000	120.90	0.00	2.84	90.00	1.227	29	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	180.0000	70.00	0.00	1.84	90.00	1.227	29	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	180.0000	60.00	0.00	1.84	90.00	1.227	29	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	180.0000	69.50	0.00	1.84	90.00	1.227	29	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	180.0000	26.20	0.00	1.84	90.00	1.227	29	1.21	1.21

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	0.0000	2081.00	0.00	0.00	90.00	1.227	29	21.51	20.57
	Sum Weight:	7543.00							

Discrete Appurtenance Pressures - Service $G_H = 1.000$

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	300.0000	55.50	-2.40	-1.39	100.00	1.254	10	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.40	-1.39	100.00	1.254	10	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.40	-1.39	100.00	1.254	10	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	300.0000	120.90	-2.40	-1.39	100.00	1.254	10	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	300.0000	70.00	-1.53	-0.89	100.00	1.254	10	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	300.0000	60.00	-1.53	-0.89	100.00	1.254	10	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	300.0000	69.50	-1.53	-0.89	100.00	1.254	10	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	300.0000	26.20	-1.53	-0.89	100.00	1.254	10	1.37	1.37
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	60.0000	55.50	2.40	-1.39	100.00	1.254	10	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.40	-1.39	100.00	1.254	10	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.40	-1.39	100.00	1.254	10	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	60.0000	120.90	2.40	-1.39	100.00	1.254	10	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	60.0000	70.00	1.53	-0.89	100.00	1.254	10	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	60.0000	60.00	1.53	-0.89	100.00	1.254	10	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	60.0000	69.50	1.53	-0.89	100.00	1.254	10	2.70	1.25
Raycap	60.0000	26.20	1.53	-0.89	100.00	1.254	10	1.37	1.37

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)									
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	180.0000	55.50	0.00	2.77	100.00	1.254	10	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.77	100.00	1.254	10	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.77	100.00	1.254	10	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	180.0000	120.90	0.00	2.77	100.00	1.254	10	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	180.0000	70.00	0.00	1.77	100.00	1.254	10	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	180.0000	60.00	0.00	1.77	100.00	1.254	10	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	180.0000	69.50	0.00	1.77	100.00	1.254	10	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	180.0000	26.20	0.00	1.77	100.00	1.254	10	1.37	1.37
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	0.0000	2081.00	0.00	0.00	100.00	1.254	10	21.51	20.57
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	300.0000	55.50	-2.46	-1.42	90.00	1.227	9	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.46	-1.42	90.00	1.227	9	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.46	-1.42	90.00	1.227	9	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	300.0000	120.90	-2.46	-1.42	90.00	1.227	9	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	300.0000	70.00	-1.60	-0.92	90.00	1.227	9	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	300.0000	60.00	-1.60	-0.92	90.00	1.227	9	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	300.0000	69.50	-1.60	-0.92	90.00	1.227	9	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	300.0000	26.20	-1.60	-0.92	90.00	1.227	9	1.37	1.37
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	60.0000	55.50	2.46	-1.42	90.00	1.227	9	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9",	60.0000	80.70	2.46	-1.42	90.00	1.227	9	4.15	2.80

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_z psf	C_AA_C Front ft^2	C_AA_C Side ft^2
66.1lb) w/ MP									
Ericsson Air 6419 B77D (28.3"x16.1"x7.9",	60.0000	80.70	2.46	-1.42	90.00	1.227	9	4.15	2.80
66.1lb) w/ MP									
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	60.0000	120.90	2.46	-1.42	90.00	1.227	9	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	60.0000	70.00	1.60	-0.92	90.00	1.227	9	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	60.0000	60.00	1.60	-0.92	90.00	1.227	9	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	60.0000	69.50	1.60	-0.92	90.00	1.227	9	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	60.0000	26.20	1.60	-0.92	90.00	1.227	9	1.37	1.37
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	180.0000	55.50	0.00	2.84	90.00	1.227	9	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.84	90.00	1.227	9	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.84	90.00	1.227	9	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	180.0000	120.90	0.00	2.84	90.00	1.227	9	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	180.0000	70.00	0.00	1.84	90.00	1.227	9	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	180.0000	60.00	0.00	1.84	90.00	1.227	9	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	180.0000	69.50	0.00	1.84	90.00	1.227	9	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	180.0000	26.20	0.00	1.84	90.00	1.227	9	1.37	1.37
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	0.0000	2081.00	0.00	0.00	90.00	1.227	9	21.51	20.57
	Sum Weight:	7543.00							

Discrete Appurtenance Pressures - Along-Wind Gust $G_H = 1.000$

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_{wg} psf	C_AA_C Front ft^2	C_AA_C Side ft^2
Quintel QD668-2 (72"x18.1"x9.6", 33.6	300.0000	55.50	-2.40	-1.39	100.00	1.000	5	11.45	8.22

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_{wg} psf	C_AA_C Front ft^2	C_AA_C Side ft^2
lbs) w/ MP									
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.40	-1.39	100.00	1.000	5	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.40	-1.39	100.00	1.000	5	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	300.0000	120.90	-2.40	-1.39	100.00	1.000	5	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	300.0000	70.00	-1.53	-0.89	100.00	1.000	5	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	300.0000	60.00	-1.53	-0.89	100.00	1.000	5	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	300.0000	69.50	-1.53	-0.89	100.00	1.000	5	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	300.0000	26.20	-1.53	-0.89	100.00	1.000	5	1.69	1.69
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	60.0000	55.50	2.40	-1.39	100.00	1.000	5	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.40	-1.39	100.00	1.000	5	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.40	-1.39	100.00	1.000	5	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	60.0000	120.90	2.40	-1.39	100.00	1.000	5	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	60.0000	70.00	1.53	-0.89	100.00	1.000	5	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	60.0000	60.00	1.53	-0.89	100.00	1.000	5	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	60.0000	69.50	1.53	-0.89	100.00	1.000	5	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	60.0000	26.20	1.53	-0.89	100.00	1.000	5	1.69	1.69
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	180.0000	55.50	0.00	2.77	100.00	1.000	5	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.77	100.00	1.000	5	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.77	100.00	1.000	5	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	180.0000	120.90	0.00	2.77	100.00	1.000	5	13.58	8.22
Ericsson RRU 4490	180.0000	70.00	0.00	1.77	100.00	1.000	5	2.68	1.22

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_{wg} psf	C_AA_C Front ft^2	C_AA_C Side ft^2
B5/B12A (20.6"x15.6"x7", 70 lbs)									
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	180.0000	60.00	0.00	1.77	100.00	1.000	5	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	180.0000	69.50	0.00	1.77	100.00	1.000	5	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	180.0000	26.20	0.00	1.77	100.00	1.000	5	1.69	1.69
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	0.0000	2081.00	0.00	0.00	100.00	1.000	5	21.51	20.57
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	300.0000	55.50	-2.46	-1.42	90.00	1.000	5	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.46	-1.42	90.00	1.000	5	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	300.0000	80.70	-2.46	-1.42	90.00	1.000	5	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	300.0000	120.90	-2.46	-1.42	90.00	1.000	5	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	300.0000	70.00	-1.60	-0.92	90.00	1.000	5	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	300.0000	60.00	-1.60	-0.92	90.00	1.000	5	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	300.0000	69.50	-1.60	-0.92	90.00	1.000	5	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	300.0000	26.20	-1.60	-0.92	90.00	1.000	5	1.69	1.69
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	60.0000	55.50	2.46	-1.42	90.00	1.000	5	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.46	-1.42	90.00	1.000	5	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	60.0000	80.70	2.46	-1.42	90.00	1.000	5	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	60.0000	120.90	2.46	-1.42	90.00	1.000	5	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	60.0000	70.00	1.60	-0.92	90.00	1.000	5	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	60.0000	60.00	1.60	-0.92	90.00	1.000	5	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	60.0000	69.50	1.60	-0.92	90.00	1.000	5	2.70	1.25

Description	Aiming Azimuth °	Weight lb	$Offset_x$ ft	$Offset_z$ ft	z ft	K_z	q_{wg} psf	C_AA_C Front ft^2	C_AA_C Side ft^2
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	60.0000	26.20	1.60	-0.92	90.00	1.000	5	1.69	1.69
Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	180.0000	55.50	0.00	2.84	90.00	1.000	5	11.45	8.22
Ericsson Air 6419 B77G (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.84	90.00	1.000	5	4.15	2.80
Ericsson Air 6419 B77D (28.3"x16.1"x7.9", 66.1lb) w/ MP	180.0000	80.70	0.00	2.84	90.00	1.000	5	4.15	2.80
Quintel QD6612-2 (72"x22"x9.6", 99 lbs) w/ MP	180.0000	120.90	0.00	2.84	90.00	1.000	5	13.58	8.22
Ericsson RRU 4490 B5/B12A (20.6"x15.6"x7", 70 lbs)	180.0000	70.00	0.00	1.84	90.00	1.000	5	2.68	1.22
Ericsson RRU 4478 B14 (18.1"x13.4"x8.26", 60lb)	180.0000	60.00	0.00	1.84	90.00	1.000	5	2.02	1.25
Ericsson RRU 4890 B2/B66 (20.6"x15.7"x7.2", 69.5 lbs)	180.0000	69.50	0.00	1.84	90.00	1.000	5	2.70	1.25
Raycap DC9-48-60-24-8C-EV (11" OD x 31.3" tall, 26.2lb)	180.0000	26.20	0.00	1.84	90.00	1.000	5	1.69	1.69
RMVD12-NPNH-3xx (EPA = 21.51 sqft front, 2081 lb), 3 Sectors	0.0000	2081.00	0.00	0.00	90.00	1.000	5	21.51	20.57
	Sum Weight:	7543.00							

Fatigue and Oscillations Wind Loads

ζ_{s1}	ζ_a	q_{wg} psf	S	f_n Hz	D_h in	V_{cr} mph	λ	q_h psf	F_{vs} plf
0.003000	0.000672	5	0.1667	0.2661	18.6562	2	65.6080	0	0.00

Force Totals

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Overturning Moments, M_x lb-ft	Sum of Overturning Moments, M_z lb-ft	Sum of Torques lb-ft
Leg Weight	5896.31					
Bracing Weight	0.00					
Total Member Self-Weight	5896.31			0.00	0.00	
Total Weight	16687.95			0.00	0.00	
Wind 0 deg - No Ice		0.00	-9637.40	-734205.33	0.00	0.00
Wind 30 deg - No Ice		4818.70	-8346.24	-635840.47	-367102.66	1265.39

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Overturning Moments, M_x lb-ft	Sum of Overturning Moments, M_z lb-ft	Sum of Torques lb-ft
Wind 45 deg - No Ice		6814.67	-6814.67	-519161.57	-519161.57	894.76
Wind 60 deg - No Ice		8346.24	-4818.70	-367102.66	-635840.47	0.00
Wind 90 deg - No Ice		9637.40	0.00	0.00	-734205.33	-1265.39
Wind 120 deg - No Ice		8346.24	4818.70	367102.66	-635840.47	0.00
Wind 135 deg - No Ice		6814.67	6814.67	519161.57	-519161.57	894.76
Wind 150 deg - No Ice		4818.70	8346.24	635840.47	-367102.66	1265.39
Wind 180 deg - No Ice		0.00	9637.40	734205.33	0.00	0.00
Wind 210 deg - No Ice		-4818.70	8346.24	635840.47	367102.66	-1265.39
Wind 225 deg - No Ice		-6814.67	6814.67	519161.57	519161.57	-894.76
Wind 240 deg - No Ice		-8346.24	4818.70	367102.66	635840.47	0.00
Wind 270 deg - No Ice		-9637.40	0.00	0.00	734205.33	1265.39
Wind 300 deg - No Ice		-8346.24	-4818.70	-367102.66	635840.47	0.00
Wind 315 deg - No Ice		-6814.67	-6814.67	-519161.57	519161.57	-894.76
Wind 330 deg - No Ice		-4818.70	-8346.24	-635840.47	367102.66	-1265.39
Total Weight	16687.95			0.00	0.00	
Wind 0 deg - Service		0.00	-3175.82	-242095.07	0.00	0.00
Wind 30 deg - Service		1587.91	-2750.34	-209660.48	-121047.53	415.86
Wind 45 deg - Service		2245.65	-2245.65	-171187.06	-171187.06	294.06
Wind 60 deg - Service		2750.34	-1587.91	-121047.53	-209660.48	0.00
Wind 90 deg - Service		3175.82	0.00	0.00	-242095.07	-415.86
Wind 120 deg - Service		2750.34	1587.91	121047.53	-209660.48	0.00
Wind 135 deg - Service		2245.65	2245.65	171187.06	-171187.06	294.06
Wind 150 deg - Service		1587.91	2750.34	209660.48	-121047.53	415.86
Wind 180 deg - Service		0.00	3175.82	242095.07	0.00	0.00
Wind 210 deg - Service		-1587.91	2750.34	209660.48	121047.53	-415.86
Wind 225 deg - Service		-2245.65	2245.65	171187.06	171187.06	-294.06
Wind 240 deg - Service		-2750.34	1587.91	121047.53	209660.48	0.00
Wind 270 deg - Service		-3175.82	0.00	0.00	242095.07	415.86
Wind 300 deg - Service		-2750.34	-1587.91	-121047.53	209660.48	0.00
Wind 315 deg - Service		-2245.65	-2245.65	-171187.06	171187.06	-294.06
Wind 330 deg - Service		-1587.91	-2750.34	-209660.48	121047.53	-415.86
Wind 0 deg - Along-Wind Gust		0.00	-1896.70	-137326.50	0.00	0.00
Wind 30 deg - Along-Wind Gust		948.35	-1642.59	-118928.23	-68663.25	218.43
Wind 45 deg - Along-Wind Gust		1341.17	-1341.17	-97104.50	-97104.50	154.46
Wind 60 deg - Along-Wind Gust		1642.59	-948.35	-68663.25	-118928.23	0.00
Wind 90 deg - Along-Wind Gust		1896.70	0.00	0.00	-137326.50	-218.43
Wind 120 deg - Along-Wind Gust		1642.59	948.35	68663.25	-118928.23	0.00
Wind 135 deg - Along-Wind Gust		1341.17	1341.17	97104.50	-97104.50	154.46
Wind 150 deg - Along-Wind Gust		948.35	1642.59	118928.23	-68663.25	218.43
Wind 180 deg - Along-Wind Gust		0.00	1896.70	137326.50	0.00	0.00
Wind 210 deg - Along-Wind Gust		-948.35	1642.59	118928.23	68663.25	-218.43
Wind 225 deg - Along-Wind Gust		-1341.17	1341.17	97104.50	97104.50	-154.46
Wind 240 deg - Along-Wind Gust		-1642.59	948.35	68663.25	118928.23	0.00
Wind 270 deg - Along-Wind Gust		-1896.70	0.00	0.00	137326.50	218.43
Wind 300 deg - Along-Wind Gust		-1642.59	-948.35	-68663.25	118928.23	0.00
Wind 315 deg - Along-Wind Gust		-1341.17	-1341.17	-97104.50	97104.50	-154.46

Load Case	Vertical Forces lb	Sum of Forces X lb	Sum of Forces Z lb	Sum of Overturning Moments, M_x lb-ft	Sum of Overturning Moments, M_z lb-ft	Sum of Torques lb-ft
Wind 330 deg - Along-Wind Gust		-948.35	-1642.59	-118928.23	68663.25	-218.43
Seismic Vertical	4343.80					
Seismic Horizontal 0 deg		0.00	-5990.90	-549823.87	0.00	0.00
Seismic Horizontal 30 deg		2995.45	-5188.27	-476161.44	-274911.93	0.00
Seismic Horizontal 45 deg		4236.21	-4236.21	-388784.19	-388784.19	0.00
Seismic Horizontal 60 deg		5188.27	-2995.45	-274911.93	-476161.44	0.00
Seismic Horizontal 90 deg		5990.90	0.00	0.00	-549823.87	0.00
Seismic Horizontal 120 deg		5188.27	2995.45	274911.93	-476161.44	0.00
Seismic Horizontal 135 deg		4236.21	4236.21	388784.19	-388784.19	0.00
Seismic Horizontal 150 deg		2995.45	5188.27	476161.44	-274911.93	0.00
Seismic Horizontal 180 deg		0.00	5990.90	549823.87	0.00	0.00
Seismic Horizontal 210 deg		-2995.45	5188.27	476161.44	274911.93	0.00
Seismic Horizontal 225 deg		-4236.21	4236.21	388784.19	388784.19	0.00
Seismic Horizontal 240 deg		-5188.27	2995.45	274911.93	476161.44	0.00
Seismic Horizontal 270 deg		-5990.90	0.00	0.00	549823.87	0.00
Seismic Horizontal 300 deg		-5188.27	-2995.45	-274911.93	476161.44	0.00
Seismic Horizontal 315 deg		-4236.21	-4236.21	-388784.19	388784.19	0.00
Seismic Horizontal 330 deg		-2995.45	-5188.27	-476161.44	274911.93	0.00

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 45 deg - No Ice
7	0.9 Dead+1.0 Wind 45 deg - No Ice
8	1.2 Dead+1.0 Wind 60 deg - No Ice
9	0.9 Dead+1.0 Wind 60 deg - No Ice
10	1.2 Dead+1.0 Wind 90 deg - No Ice
11	0.9 Dead+1.0 Wind 90 deg - No Ice
12	1.2 Dead+1.0 Wind 120 deg - No Ice
13	0.9 Dead+1.0 Wind 120 deg - No Ice
14	1.2 Dead+1.0 Wind 135 deg - No Ice
15	0.9 Dead+1.0 Wind 135 deg - No Ice
16	1.2 Dead+1.0 Wind 150 deg - No Ice
17	0.9 Dead+1.0 Wind 150 deg - No Ice
18	1.2 Dead+1.0 Wind 180 deg - No Ice
19	0.9 Dead+1.0 Wind 180 deg - No Ice
20	1.2 Dead+1.0 Wind 210 deg - No Ice
21	0.9 Dead+1.0 Wind 210 deg - No Ice
22	1.2 Dead+1.0 Wind 225 deg - No Ice
23	0.9 Dead+1.0 Wind 225 deg - No Ice
24	1.2 Dead+1.0 Wind 240 deg - No Ice
25	0.9 Dead+1.0 Wind 240 deg - No Ice
26	1.2 Dead+1.0 Wind 270 deg - No Ice
27	0.9 Dead+1.0 Wind 270 deg - No Ice
28	1.2 Dead+1.0 Wind 300 deg - No Ice
29	0.9 Dead+1.0 Wind 300 deg - No Ice
30	1.2 Dead+1.0 Wind 315 deg - No Ice
31	0.9 Dead+1.0 Wind 315 deg - No Ice
32	1.2 Dead+1.0 Wind 330 deg - No Ice

Comb. No.	Description
33	0.9 Dead+1.0 Wind 330 deg - No Ice
34	Dead+Wind 0 deg - Service
35	Dead+Wind 30 deg - Service
36	Dead+Wind 45 deg - Service
37	Dead+Wind 60 deg - Service
38	Dead+Wind 90 deg - Service
39	Dead+Wind 120 deg - Service
40	Dead+Wind 135 deg - Service
41	Dead+Wind 150 deg - Service
42	Dead+Wind 180 deg - Service
43	Dead+Wind 210 deg - Service
44	Dead+Wind 225 deg - Service
45	Dead+Wind 240 deg - Service
46	Dead+Wind 270 deg - Service
47	Dead+Wind 300 deg - Service
48	Dead+Wind 315 deg - Service
49	Dead+Wind 330 deg - Service
50	1.2 Dead+1.0 Ev+1.0 Eh 0 deg
51	0.9 Dead-1.0 Ev+1.0 Eh 0 deg
52	1.2 Dead+1.0 Ev+1.0 Eh 30 deg
53	0.9 Dead-1.0 Ev+1.0 Eh 30 deg
54	1.2 Dead+1.0 Ev+1.0 Eh 45 deg
55	0.9 Dead-1.0 Ev+1.0 Eh 45 deg
56	1.2 Dead+1.0 Ev+1.0 Eh 60 deg
57	0.9 Dead-1.0 Ev+1.0 Eh 60 deg
58	1.2 Dead+1.0 Ev+1.0 Eh 90 deg
59	0.9 Dead-1.0 Ev+1.0 Eh 90 deg
60	1.2 Dead+1.0 Ev+1.0 Eh 120 deg
61	0.9 Dead-1.0 Ev+1.0 Eh 120 deg
62	1.2 Dead+1.0 Ev+1.0 Eh 135 deg
63	0.9 Dead-1.0 Ev+1.0 Eh 135 deg
64	1.2 Dead+1.0 Ev+1.0 Eh 150 deg
65	0.9 Dead-1.0 Ev+1.0 Eh 150 deg
66	1.2 Dead+1.0 Ev+1.0 Eh 180 deg
67	0.9 Dead-1.0 Ev+1.0 Eh 180 deg
68	1.2 Dead+1.0 Ev+1.0 Eh 210 deg
69	0.9 Dead-1.0 Ev+1.0 Eh 210 deg
70	1.2 Dead+1.0 Ev+1.0 Eh 225 deg
71	0.9 Dead-1.0 Ev+1.0 Eh 225 deg
72	1.2 Dead+1.0 Ev+1.0 Eh 240 deg
73	0.9 Dead-1.0 Ev+1.0 Eh 240 deg
74	1.2 Dead+1.0 Ev+1.0 Eh 270 deg
75	0.9 Dead-1.0 Ev+1.0 Eh 270 deg
76	1.2 Dead+1.0 Ev+1.0 Eh 300 deg
77	0.9 Dead-1.0 Ev+1.0 Eh 300 deg
78	1.2 Dead+1.0 Ev+1.0 Eh 315 deg
79	0.9 Dead-1.0 Ev+1.0 Eh 315 deg
80	1.2 Dead+1.0 Ev+1.0 Eh 330 deg
81	0.9 Dead-1.0 Ev+1.0 Eh 330 deg
82	1.0 Fatigue - Along-Wind Gust 0 deg
83	1.0 Fatigue - Along-Wind Gust 30 deg
84	1.0 Fatigue - Along-Wind Gust 45 deg
85	1.0 Fatigue - Along-Wind Gust 60 deg
86	1.0 Fatigue - Along-Wind Gust 90 deg
87	1.0 Fatigue - Along-Wind Gust 120 deg
88	1.0 Fatigue - Along-Wind Gust 135 deg
89	1.0 Fatigue - Along-Wind Gust 150 deg
90	1.0 Fatigue - Along-Wind Gust 180 deg
91	1.0 Fatigue - Along-Wind Gust 210 deg
92	1.0 Fatigue - Along-Wind Gust 225 deg
93	1.0 Fatigue - Along-Wind Gust 240 deg
94	1.0 Fatigue - Along-Wind Gust 270 deg

Comb. No.	Description
95	1.0 Fatigue - Along-Wind Gust 300 deg
96	1.0 Fatigue - Along-Wind Gust 315 deg
97	1.0 Fatigue - Along-Wind Gust 330 deg

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial lb	Major Axis Moment lb-ft	Minor Axis Moment lb-ft
L1	103 - 63	Pole	Max Tension	92	17.07	10523.32	-10521.47
			Max. Compression	58	-14368.89	-194959.07	0.00
			Max. Mx	10	-11547.24	-213754.53	-51.94
			Max. My	18	-11547.33	0.00	-213737.96
			Max. Vy	10	7965.85	-213754.53	-51.94
			Max. Vx	18	7965.25	0.00	-213737.96
			Max. Torque	11			1260.13
L2	63 - 26.5	Pole	Max Tension	84	16.17	-28806.06	28806.08
			Max. Compression	58	-19519.42	-427672.53	0.00
			Max. Mx	26	-15801.10	518314.65	-23.00
			Max. My	18	-15801.13	0.00	-518268.56
			Max. Vy	26	-9059.82	518314.65	-23.00
			Max. Vx	18	9059.11	0.00	-518268.56
			Max. Torque	11			1257.56
L3	26.5 - 1	Pole	Max Tension	96	8.80	66848.99	66846.78
			Max. Compression	54	-24365.48	-435143.77	435143.77
			Max. Mx	26	-20017.47	798166.65	-25.48
			Max. My	18	-20017.43	0.00	-798095.42
			Max. Vy	26	-9653.41	798166.65	-25.48
			Max. Vx	2	-9652.64	0.00	798095.42
			Max. Torque	11			1252.57

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical lb	Horizontal, X lb	Horizontal, Z lb
Pole	Max. Vert	54	24369.33	-4236.07	4236.07
	Max. H_x	26	20025.50	9636.74	0.00
	Max. H_z	2	20025.46	0.00	9635.96
	Max. M_x	2	798095.42	0.00	9635.96
	Max. M_z	10	798166.65	-9636.74	0.00
	Max. Torsion	11	1251.16	-9636.54	0.00
	Min. Vert	82	0.00	0.00	1896.74
	Min. H_x	10	20025.50	-9636.74	0.00
	Min. H_z	18	20025.46	0.00	-9635.96
	Min. M_x	18	-798095.42	0.00	-9635.96
	Min. M_z	26	-798166.65	9636.74	0.00
	Min. Torsion	27	-1251.16	9636.54	0.00

Tower Mast Reaction Summary

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
Dead Only	16687.95	0.00	0.00	0.00	0.00	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	20025.46	0.00	-9635.96	-798095.42	0.00	0.00
0.9 Dead+1.0 Wind 0 deg - No Ice	15019.05	0.00	-9635.50	-780451.94	0.00	0.00
1.2 Dead+1.0 Wind 30 deg - No Ice	20025.53	4818.64	-8346.12	-691288.05	-399085.51	1250.24
0.9 Dead+1.0 Wind 30 deg - No Ice	15019.15	4818.67	-8346.17	-676039.41	-390290.47	1251.15
1.2 Dead+1.0 Wind 45 deg - No Ice	20025.53	6814.58	-6814.58	-564436.86	-564410.85	884.05
0.9 Dead+1.0 Wind 45 deg - No Ice	15019.15	6814.62	-6814.62	-551985.63	-551967.29	884.69
1.2 Dead+1.0 Wind 60 deg - No Ice	20025.53	8346.12	-4818.64	-399108.04	-691275.06	-0.01
0.9 Dead+1.0 Wind 60 deg - No Ice	15019.15	8346.17	-4818.67	-390306.35	-676030.25	-0.01
1.2 Dead+1.0 Wind 90 deg - No Ice	20025.50	9636.74	-0.00	25.80	-798166.65	-1250.25
0.9 Dead+1.0 Wind 90 deg - No Ice	15019.11	9636.54	-0.00	18.00	-780542.97	-1251.16
1.2 Dead+1.0 Wind 120 deg - No Ice	20025.53	8346.12	4818.64	399108.04	-691275.06	0.01
0.9 Dead+1.0 Wind 120 deg - No Ice	15019.15	8346.17	4818.67	390306.35	-676030.25	0.01
1.2 Dead+1.0 Wind 135 deg - No Ice	20025.53	6814.58	6814.58	564410.85	-564436.86	884.05
0.9 Dead+1.0 Wind 135 deg - No Ice	15019.15	6814.62	6814.62	551967.29	-551985.63	884.69
1.2 Dead+1.0 Wind 150 deg - No Ice	20025.53	4818.64	8346.12	691262.04	-399130.56	1250.22
0.9 Dead+1.0 Wind 150 deg - No Ice	15019.15	4818.67	8346.17	676021.07	-390322.23	1251.13
1.2 Dead+1.0 Wind 180 deg - No Ice	20025.46	0.00	9635.96	798095.42	0.00	0.00
0.9 Dead+1.0 Wind 180 deg - No Ice	15019.05	0.00	9635.50	780451.94	0.00	0.00
1.2 Dead+1.0 Wind 210 deg - No Ice	20025.53	-4818.64	8346.12	691262.04	399130.56	-1250.22
0.9 Dead+1.0 Wind 210 deg - No Ice	15019.15	-4818.67	8346.17	676021.07	390322.23	-1251.13
1.2 Dead+1.0 Wind 225 deg - No Ice	20025.53	-6814.58	6814.58	564410.85	564436.86	-884.05
0.9 Dead+1.0 Wind 225 deg - No Ice	15019.15	-6814.62	6814.62	551967.29	551985.63	-884.69
1.2 Dead+1.0 Wind 240 deg - No Ice	20025.53	-8346.12	4818.64	399108.04	691275.06	-0.01
0.9 Dead+1.0 Wind 240 deg - No Ice	15019.15	-8346.17	4818.67	390306.35	676030.25	-0.01
1.2 Dead+1.0 Wind 270 deg - No Ice	20025.50	-9636.74	-0.00	25.80	798166.65	1250.25
0.9 Dead+1.0 Wind 270 deg - No Ice	15019.11	-9636.54	-0.00	18.00	780542.97	1251.16
1.2 Dead+1.0 Wind 300 deg - No Ice	20025.53	-8346.12	-4818.64	-399108.04	691275.06	0.01
0.9 Dead+1.0 Wind 300 deg - No Ice	15019.15	-8346.17	-4818.67	-390306.35	676030.25	0.01
1.2 Dead+1.0 Wind 315 deg - No Ice	20025.53	-6814.58	-6814.58	-564436.86	564410.85	-884.05
0.9 Dead+1.0 Wind 315 deg - No Ice	15019.15	-6814.62	-6814.62	-551985.63	551967.29	-884.69

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
1.2 Dead+1.0 Wind 330 deg - No Ice	20025.53	-4818.64	-8346.12	-691288.05	399085.51	-1250.24
0.9 Dead+1.0 Wind 330 deg - No Ice	15019.15	-4818.67	-8346.17	-676039.41	390290.47	-1251.15
Dead+Wind 0 deg - Service	16687.94	0.00	-3175.05	-259632.05	0.00	0.00
Dead+Wind 30 deg - Service	16687.94	1587.53	-2749.67	-224849.11	-129814.25	415.34
Dead+Wind 45 deg - Service	16687.94	2245.10	-2245.10	-183588.79	-183586.60	293.69
Dead+Wind 60 deg - Service	16687.94	2749.67	-1587.52	-129816.14	-224848.02	-0.00
Dead+Wind 90 deg - Service	16687.94	3175.05	-0.00	2.18	-259632.05	-415.34
Dead+Wind 120 deg - Service	16687.94	2749.67	1587.52	129816.14	-224848.02	0.00
Dead+Wind 135 deg - Service	16687.94	2245.10	2245.10	183586.60	-183588.79	293.69
Dead+Wind 150 deg - Service	16687.94	1587.52	2749.67	224846.93	-129818.03	415.34
Dead+Wind 180 deg - Service	16687.94	0.00	3175.05	259632.05	0.00	0.00
Dead+Wind 210 deg - Service	16687.94	-1587.52	2749.67	224846.93	129818.03	-415.34
Dead+Wind 225 deg - Service	16687.94	-2245.10	2245.10	183586.60	183588.79	-293.69
Dead+Wind 240 deg - Service	16687.94	-2749.67	1587.52	129816.14	224848.02	-0.00
Dead+Wind 270 deg - Service	16687.94	-3175.05	-0.00	2.18	259632.05	415.34
Dead+Wind 300 deg - Service	16687.94	-2749.67	-1587.52	-129816.14	224848.02	0.00
Dead+Wind 315 deg - Service	16687.94	-2245.10	-2245.10	-183588.79	183586.60	-293.69
Dead+Wind 330 deg - Service	16687.94	-1587.53	-2749.67	-224849.11	129814.25	-415.34
1.2 Dead+1.0 Ev+1.0 Eh 0 deg	24369.26	0.00	-5989.11	-615230.89	0.00	0.00
0.9 Dead-1.0 Ev+1.0 Eh 0 deg	10675.32	0.00	-5990.00	-574880.64	0.00	0.00
1.2 Dead+1.0 Ev+1.0 Eh 30 deg	24369.33	2995.36	-5188.11	-532939.95	-307693.20	0.01
0.9 Dead-1.0 Ev+1.0 Eh 30 deg	10675.35	2995.41	-5188.21	-497920.83	-287474.80	0.00
1.2 Dead+1.0 Ev+1.0 Eh 45 deg	24369.33	4236.07	-4236.07	-435143.77	-435143.77	0.00
0.9 Dead-1.0 Ev+1.0 Eh 45 deg	10675.35	4236.15	-4236.15	-406550.71	-406550.71	0.00
1.2 Dead+1.0 Ev+1.0 Eh 60 deg	24369.33	5188.11	-2995.36	-307693.20	-532939.95	-0.01
0.9 Dead-1.0 Ev+1.0 Eh 60 deg	10675.35	5188.21	-2995.41	-287474.80	-497920.83	-0.00
1.2 Dead+1.0 Ev+1.0 Eh 90 deg	24369.26	5989.11	0.00	0.00	-615230.89	0.00
0.9 Dead-1.0 Ev+1.0 Eh 90 deg	10675.32	5990.00	0.00	0.00	-574880.64	0.00
1.2 Dead+1.0 Ev+1.0 Eh 120 deg	24369.33	5188.11	2995.36	307693.20	-532939.95	0.01
0.9 Dead-1.0 Ev+1.0 Eh 120 deg	10675.35	5188.21	2995.41	287474.80	-497920.83	0.00
1.2 Dead+1.0 Ev+1.0 Eh 135 deg	24369.33	4236.07	4236.07	435143.77	-435143.77	0.00
0.9 Dead-1.0 Ev+1.0 Eh 135 deg	10675.35	4236.15	4236.15	406550.71	-406550.71	0.00
1.2 Dead+1.0 Ev+1.0 Eh 150 deg	24369.33	2995.36	5188.11	532939.95	-307693.20	-0.01
0.9 Dead-1.0 Ev+1.0 Eh 150 deg	10675.35	2995.41	5188.21	497920.83	-287474.80	-0.00
1.2 Dead+1.0 Ev+1.0 Eh 180 deg	24369.26	0.00	5989.11	615230.89	0.00	0.00
0.9 Dead-1.0 Ev+1.0 Eh 180 deg	10675.32	0.00	5990.00	574880.64	0.00	0.00
1.2 Dead+1.0 Ev+1.0 Eh 210 deg	24369.33	-2995.36	5188.11	532939.95	307693.20	0.01
0.9 Dead-1.0 Ev+1.0 Eh 210 deg	10675.35	-2995.41	5188.21	497920.83	287474.80	0.00
1.2 Dead+1.0 Ev+1.0 Eh 225 deg	24369.33	-4236.07	4236.07	435143.77	435143.77	0.00
0.9 Dead-1.0 Ev+1.0 Eh 225 deg	10675.35	-4236.15	4236.15	406550.71	406550.71	0.00
1.2 Dead+1.0 Ev+1.0 Eh 240 deg	24369.33	-5188.11	2995.36	307693.20	532939.95	-0.01
0.9 Dead-1.0 Ev+1.0 Eh 240 deg	10675.35	-5188.21	2995.41	287474.80	497920.83	-0.00
1.2 Dead+1.0 Ev+1.0 Eh 270 deg	24369.26	-5989.11	0.00	0.00	615230.89	0.00
0.9 Dead-1.0 Ev+1.0 Eh 270	10675.32	-5990.00	0.00	0.00	574880.64	0.00

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	lb	lb	lb	lb-ft	lb-ft	lb-ft
deg						
1.2 Dead+1.0 Ev+1.0 Eh 300 deg	24369.33	-5188.11	-2995.36	-307693.20	532939.95	0.01
0.9 Dead-1.0 Ev+1.0 Eh 300 deg	10675.35	-5188.21	-2995.41	-287474.80	497920.83	0.00
1.2 Dead+1.0 Ev+1.0 Eh 315 deg	24369.33	-4236.07	-4236.07	-435143.77	435143.77	0.00
0.9 Dead-1.0 Ev+1.0 Eh 315 deg	10675.35	-4236.15	-4236.15	-406550.71	406550.71	0.00
1.2 Dead+1.0 Ev+1.0 Eh 330 deg	24369.33	-2995.36	-5188.11	-532939.95	307693.20	-0.01
0.9 Dead-1.0 Ev+1.0 Eh 330 deg	10675.35	-2995.41	-5188.21	-497920.83	287474.80	-0.00
1.0 Fatigue - Along-Wind Gust 0 deg	0.00	0.00	-1896.74	-137323.17	0.00	0.00
1.0 Fatigue - Along-Wind Gust 30 deg	0.00	948.42	-1642.61	-118924.58	-68665.57	218.37
1.0 Fatigue - Along-Wind Gust 45 deg	0.00	1341.23	-1341.19	-97101.85	-97104.93	154.41
1.0 Fatigue - Along-Wind Gust 60 deg	0.00	1642.63	-948.39	-68662.90	-118926.12	-0.00
1.0 Fatigue - Along-Wind Gust 90 deg	0.00	1896.74	-0.04	-3.08	-137323.17	-218.37
1.0 Fatigue - Along-Wind Gust 120 deg	0.00	1642.63	948.39	68662.90	-118926.12	0.00
1.0 Fatigue - Along-Wind Gust 135 deg	0.00	1341.19	1341.23	97104.93	-97101.85	154.41
1.0 Fatigue - Along-Wind Gust 150 deg	0.00	948.35	1642.65	118927.66	-68660.23	218.37
1.0 Fatigue - Along-Wind Gust 180 deg	0.00	0.00	1896.74	137323.17	0.00	0.00
1.0 Fatigue - Along-Wind Gust 210 deg	0.00	-948.35	1642.65	118927.66	68660.23	-218.37
1.0 Fatigue - Along-Wind Gust 225 deg	0.00	-1341.19	1341.23	97104.93	97101.85	-154.41
1.0 Fatigue - Along-Wind Gust 240 deg	0.00	-1642.63	948.39	68662.90	118926.12	-0.00
1.0 Fatigue - Along-Wind Gust 270 deg	0.00	-1896.74	-0.04	-3.08	137323.17	218.37
1.0 Fatigue - Along-Wind Gust 300 deg	0.00	-1642.63	-948.39	-68662.90	118926.12	0.00
1.0 Fatigue - Along-Wind Gust 315 deg	0.00	-1341.23	-1341.19	-97101.85	97104.93	-154.41
1.0 Fatigue - Along-Wind Gust 330 deg	0.00	-948.42	-1642.61	-118924.58	68665.57	-218.37

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX	PY	PZ	PX	PY	PZ	% Error
	lb	lb	lb	lb	lb	lb	
1	0.00	-16687.95	0.00	0.00	16687.95	0.00	0.000%
2	0.00	-20025.54	-9637.40	0.00	20025.46	9635.96	0.006%
3	0.00	-15019.16	-9637.40	0.00	15019.05	9635.50	0.011%
4	4818.70	-20025.54	-8346.24	-4818.64	20025.53	8346.12	0.001%
5	4818.70	-15019.16	-8346.24	-4818.67	15019.15	8346.17	0.000%
6	6814.67	-20025.54	-6814.67	-6814.58	20025.53	6814.58	0.001%
7	6814.67	-15019.16	-6814.67	-6814.62	15019.15	6814.62	0.000%

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX lb	PY lb	PZ lb	PX lb	PY lb	PZ lb	% Error
8	8346.24	-20025.54	-4818.70	-8346.12	20025.53	4818.64	0.001%
9	8346.24	-15019.16	-4818.70	-8346.17	15019.15	4818.67	0.000%
10	9637.40	-20025.54	0.00	-9636.74	20025.50	0.00	0.003%
11	9637.40	-15019.16	0.00	-9636.54	15019.11	0.00	0.005%
12	8346.24	-20025.54	4818.70	-8346.12	20025.53	-4818.64	0.001%
13	8346.24	-15019.16	4818.70	-8346.17	15019.15	-4818.67	0.000%
14	6814.67	-20025.54	6814.67	-6814.58	20025.53	-6814.58	0.001%
15	6814.67	-15019.16	6814.67	-6814.62	15019.15	-6814.62	0.000%
16	4818.70	-20025.54	8346.24	-4818.64	20025.53	-8346.12	0.001%
17	4818.70	-15019.16	8346.24	-4818.67	15019.15	-8346.17	0.000%
18	0.00	-20025.54	9637.40	0.00	20025.46	-9635.96	0.006%
19	0.00	-15019.16	9637.40	0.00	15019.05	-9635.50	0.011%
20	-4818.70	-20025.54	8346.24	4818.64	20025.53	-8346.12	0.001%
21	-4818.70	-15019.16	8346.24	4818.67	15019.15	-8346.17	0.000%
22	-6814.67	-20025.54	6814.67	6814.58	20025.53	-6814.58	0.001%
23	-6814.67	-15019.16	6814.67	6814.62	15019.15	-6814.62	0.000%
24	-8346.24	-20025.54	4818.70	8346.12	20025.53	-4818.64	0.001%
25	-8346.24	-15019.16	4818.70	8346.17	15019.15	-4818.67	0.000%
26	-9637.40	-20025.54	0.00	9636.74	20025.50	0.00	0.003%
27	-9637.40	-15019.16	0.00	9636.54	15019.11	0.00	0.005%
28	-8346.24	-20025.54	-4818.70	8346.12	20025.53	4818.64	0.001%
29	-8346.24	-15019.16	-4818.70	8346.17	15019.15	4818.67	0.000%
30	-6814.67	-20025.54	-6814.67	6814.58	20025.53	6814.58	0.001%
31	-6814.67	-15019.16	-6814.67	6814.62	15019.15	6814.62	0.000%
32	-4818.70	-20025.54	-8346.24	4818.64	20025.53	8346.12	0.001%
33	-4818.70	-15019.16	-8346.24	4818.67	15019.15	8346.17	0.000%
34	0.00	-16687.95	-3175.82	0.00	16687.94	3175.05	0.005%
35	1587.91	-16687.95	-2750.34	-1587.53	16687.94	2749.67	0.005%
36	2245.65	-16687.95	-2245.65	-2245.10	16687.94	2245.10	0.005%
37	2750.34	-16687.95	-1587.91	-2749.67	16687.94	1587.52	0.005%
38	3175.82	-16687.95	0.00	-3175.05	16687.94	0.00	0.005%
39	2750.34	-16687.95	1587.91	-2749.67	16687.94	-1587.52	0.005%
40	2245.65	-16687.95	2245.65	-2245.10	16687.94	-2245.10	0.005%
41	1587.91	-16687.95	2750.34	-1587.52	16687.94	-2749.67	0.005%
42	0.00	-16687.95	3175.82	0.00	16687.94	-3175.05	0.005%
43	-1587.91	-16687.95	2750.34	1587.52	16687.94	-2749.67	0.005%
44	-2245.65	-16687.95	2245.65	2245.10	16687.94	-2245.10	0.005%
45	-2750.34	-16687.95	1587.91	2749.67	16687.94	-1587.52	0.005%
46	-3175.82	-16687.95	0.00	3175.05	16687.94	0.00	0.005%
47	-2750.34	-16687.95	-1587.91	2749.67	16687.94	1587.52	0.005%
48	-2245.65	-16687.95	-2245.65	2245.10	16687.94	2245.10	0.005%
49	-1587.91	-16687.95	-2750.34	1587.53	16687.94	2749.67	0.005%
50	0.00	-24369.34	-5990.90	0.00	24369.26	5989.11	0.007%
51	0.00	-10675.36	-5990.90	0.00	10675.32	5990.00	0.007%
52	2995.45	-24369.34	-5188.27	-2995.36	24369.33	5188.11	0.001%
53	2995.45	-10675.36	-5188.27	-2995.41	10675.35	5188.21	0.001%
54	4236.21	-24369.34	-4236.21	-4236.07	24369.33	4236.07	0.001%
55	4236.21	-10675.36	-4236.21	-4236.15	10675.35	4236.15	0.001%
56	5188.27	-24369.34	-2995.45	-5188.11	24369.33	2995.36	0.001%
57	5188.27	-10675.36	-2995.45	-5188.21	10675.35	2995.41	0.001%
58	5990.90	-24369.34	0.00	-5989.11	24369.26	0.00	0.007%
59	5990.90	-10675.36	0.00	-5990.00	10675.32	0.00	0.007%
60	5188.27	-24369.34	2995.45	-5188.11	24369.33	-2995.36	0.001%
61	5188.27	-10675.36	2995.45	-5188.21	10675.35	-2995.41	0.001%
62	4236.21	-24369.34	4236.21	-4236.07	24369.33	-4236.07	0.001%
63	4236.21	-10675.36	4236.21	-4236.15	10675.35	-4236.15	0.001%
64	2995.45	-24369.34	5188.27	-2995.36	24369.33	-5188.11	0.001%
65	2995.45	-10675.36	5188.27	-2995.41	10675.35	-5188.21	0.001%
66	0.00	-24369.34	5990.90	0.00	24369.26	-5989.11	0.007%
67	0.00	-10675.36	5990.90	0.00	10675.32	-5990.00	0.007%
68	-2995.45	-24369.34	5188.27	2995.36	24369.33	-5188.11	0.001%

Load Comb.	Sum of Applied Forces PX lb	PY lb	PZ lb	Sum of Reactions PX lb	PY lb	PZ lb	% Error
69	-2995.45	-10675.36	5188.27	2995.41	10675.35	-5188.21	0.001%
70	-4236.21	-24369.34	4236.21	4236.07	24369.33	-4236.07	0.001%
71	-4236.21	-10675.36	4236.21	4236.15	10675.35	-4236.15	0.001%
72	-5188.27	-24369.34	2995.45	5188.11	24369.33	-2995.36	0.001%
73	-5188.27	-10675.36	2995.45	5188.21	10675.35	-2995.41	0.001%
74	-5990.90	-24369.34	0.00	5989.11	24369.26	0.00	0.007%
75	-5990.90	-10675.36	0.00	5990.00	10675.32	0.00	0.007%
76	-5188.27	-24369.34	-2995.45	5188.11	24369.33	2995.36	0.001%
77	-5188.27	-10675.36	-2995.45	5188.21	10675.35	2995.41	0.001%
78	-4236.21	-24369.34	-4236.21	4236.07	24369.33	4236.07	0.001%
79	-4236.21	-10675.36	-4236.21	4236.15	10675.35	4236.15	0.001%
80	-2995.45	-24369.34	-5188.27	2995.36	24369.33	5188.11	0.001%
81	-2995.45	-10675.36	-5188.27	2995.41	10675.35	5188.21	0.001%
82	0.00	0.00	-1896.70	0.00	0.00	1896.74	0.002%
83	948.35	0.00	-1642.59	-948.42	0.00	1642.61	0.004%
84	1341.17	0.00	-1341.17	-1341.23	0.00	1341.19	0.004%
85	1642.59	0.00	-948.35	-1642.63	0.00	948.39	0.003%
86	1896.70	0.00	0.00	-1896.74	0.00	0.04	0.003%
87	1642.59	0.00	948.35	-1642.63	0.00	-948.39	0.003%
88	1341.17	0.00	1341.17	-1341.19	0.00	-1341.23	0.004%
89	948.35	0.00	1642.59	-948.35	0.00	-1642.65	0.003%
90	0.00	0.00	1896.70	0.00	0.00	-1896.74	0.002%
91	-948.35	0.00	1642.59	948.35	0.00	-1642.65	0.003%
92	-1341.17	0.00	1341.17	1341.19	0.00	-1341.23	0.004%
93	-1642.59	0.00	948.35	1642.63	0.00	-948.39	0.003%
94	-1896.70	0.00	0.00	1896.74	0.00	0.04	0.003%
95	-1642.59	0.00	-948.35	1642.63	0.00	948.39	0.003%
96	-1341.17	0.00	-1341.17	1341.23	0.00	1341.19	0.004%
97	-948.35	0.00	-1642.59	948.42	0.00	1642.61	0.004%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	16	0.00008784	0.00007651
3	Yes	15	0.00011380	0.00013056
4	Yes	19	0.00000001	0.00012852
5	Yes	19	0.00000001	0.00008615
6	Yes	19	0.00000001	0.00013737
7	Yes	19	0.00000001	0.00009157
8	Yes	19	0.00000001	0.00011949
9	Yes	19	0.00000001	0.00007967
10	Yes	17	0.00000001	0.00007739
11	Yes	16	0.00005243	0.00012442
12	Yes	19	0.00000001	0.00011949
13	Yes	19	0.00000001	0.00007967
14	Yes	19	0.00000001	0.00013737
15	Yes	19	0.00000001	0.00009157
16	Yes	19	0.00000001	0.00011216
17	Yes	19	0.00000001	0.00007449
18	Yes	16	0.00008784	0.00007651
19	Yes	15	0.00011380	0.00013056
20	Yes	19	0.00000001	0.00011216
21	Yes	19	0.00000001	0.00007449
22	Yes	19	0.00000001	0.00013737

23	Yes	19	0.00000001	0.00009157
24	Yes	19	0.00000001	0.00011949
25	Yes	19	0.00000001	0.00007967
26	Yes	17	0.00000001	0.00007739
27	Yes	16	0.00005243	0.00012442
28	Yes	19	0.00000001	0.00011949
29	Yes	19	0.00000001	0.00007967
30	Yes	19	0.00000001	0.00013737
31	Yes	19	0.00000001	0.00009157
32	Yes	19	0.00000001	0.00012852
33	Yes	19	0.00000001	0.00008615
34	Yes	15	0.00014132	0.00005548
35	Yes	15	0.00014105	0.00008801
36	Yes	15	0.00014097	0.00007203
37	Yes	15	0.00014105	0.00006555
38	Yes	15	0.00014132	0.00006364
39	Yes	15	0.00014105	0.00006555
40	Yes	15	0.00014097	0.00007203
41	Yes	15	0.00014105	0.00005305
42	Yes	15	0.00014132	0.00005548
43	Yes	15	0.00014105	0.00005305
44	Yes	15	0.00014097	0.00007203
45	Yes	15	0.00014105	0.00006555
46	Yes	15	0.00014132	0.00006364
47	Yes	15	0.00014105	0.00006555
48	Yes	15	0.00014097	0.00007203
49	Yes	15	0.00014105	0.00008801
50	Yes	16	0.00013723	0.00007889
51	Yes	15	0.00006618	0.00009106
52	Yes	19	0.00000001	0.00009636
53	Yes	18	0.00000001	0.00006831
54	Yes	19	0.00000001	0.00011060
55	Yes	18	0.00000001	0.00007828
56	Yes	19	0.00000001	0.00009636
57	Yes	18	0.00000001	0.00006831
58	Yes	16	0.00013723	0.00007889
59	Yes	15	0.00006618	0.00009106
60	Yes	19	0.00000001	0.00009636
61	Yes	18	0.00000001	0.00006831
62	Yes	19	0.00000001	0.00011060
63	Yes	18	0.00000001	0.00007828
64	Yes	19	0.00000001	0.00009636
65	Yes	18	0.00000001	0.00006831
66	Yes	16	0.00013723	0.00007889
67	Yes	15	0.00006618	0.00009106
68	Yes	19	0.00000001	0.00009636
69	Yes	18	0.00000001	0.00006831
70	Yes	19	0.00000001	0.00011060
71	Yes	18	0.00000001	0.00007828
72	Yes	19	0.00000001	0.00009636
73	Yes	18	0.00000001	0.00006831
74	Yes	16	0.00013723	0.00007889
75	Yes	15	0.00006618	0.00009106
76	Yes	19	0.00000001	0.00009636
77	Yes	18	0.00000001	0.00006831
78	Yes	19	0.00000001	0.00011060
79	Yes	18	0.00000001	0.00007828
80	Yes	19	0.00000001	0.00009636
81	Yes	18	0.00000001	0.00006831
82	Yes	6	0.00000001	0.00000001
83	Yes	6	0.00000001	0.00000001
84	Yes	6	0.00000001	0.00000001
85	Yes	6	0.00000001	0.00000001
86	Yes	6	0.00000001	0.00000001

87	Yes	6	0.00000001	0.00000001
88	Yes	6	0.00000001	0.00000001
89	Yes	6	0.00000001	0.00000001
90	Yes	6	0.00000001	0.00000001
91	Yes	6	0.00000001	0.00000001
92	Yes	6	0.00000001	0.00000001
93	Yes	6	0.00000001	0.00000001
94	Yes	6	0.00000001	0.00000001
95	Yes	6	0.00000001	0.00000001
96	Yes	6	0.00000001	0.00000001
97	Yes	6	0.00000001	0.00000001

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	103 - 63	22.692	42	1.7531	0.0111
L2	66.5 - 26.5	10.104	42	1.4125	0.0052
L3	30.83 - 1	2.173	42	0.6560	0.0017

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
100.00	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	42	21.591	1.7346	0.0106	24046
96.30	Tapered 1 seismic	42	20.238	1.7111	0.0099	17944
92.90	Coax seismic	42	19.002	1.6884	0.0094	11903
90.00	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	42	17.957	1.6677	0.0089	9248
83.00	Tapered 1 seismic	42	15.484	1.6107	0.0077	6011
78.60	Coax seismic	42	13.977	1.5681	0.0070	4926
69.70	Tapered 1 seismic	42	11.083	1.4600	0.0056	3611
64.30	Coax seismic	42	9.451	1.3768	0.0049	3179
59.80	Tapered 2 seismic	42	8.175	1.2968	0.0044	2956
50.00	Coax seismic	42	5.688	1.0965	0.0033	2572
46.50	Tapered 2 seismic	42	4.905	1.0188	0.0029	2458
35.70	Coax seismic	42	2.879	0.7691	0.0020	2162
33.20	Tapered 2 seismic	42	2.500	0.7108	0.0018	2115
25.90	Tapered 3 seismic	42	1.594	0.5436	0.0013	2456
21.40	Coax seismic	42	1.170	0.4429	0.0011	2998
15.90	Tapered 3 seismic	40	0.760	0.3218	0.0007	4105
7.10	Coax seismic	40	0.274	0.1311	0.0003	10026
6.00	Tapered 3 seismic	40	0.223	0.1074	0.0002	12231

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	103 - 63	69.930	26	5.4116	0.0336
L2	66.5 - 26.5	31.125	26	4.3578	0.0157
L3	30.83 - 1	6.688	26	2.0203	0.0050

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
100.00	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	26	66.537	5.3541	0.0320	7886
96.30	Tapered 1 seismic	26	62.364	5.2814	0.0301	5884
92.90	Coax seismic	26	58.554	5.2112	0.0283	3903
90.00	Quintel QD668-2 (72"x18.1"x9.6", 33.6 lbs) w/ MP	26	55.332	5.1472	0.0268	3031
83.00	Tapered 1 seismic	26	47.709	4.9710	0.0232	1969
78.60	Coax seismic	26	43.065	4.8390	0.0211	1613
69.70	Tapered 1 seismic	26	34.145	4.5047	0.0170	1180
64.30	Coax seismic	26	29.115	4.2474	0.0148	1038
59.80	Tapered 2 seismic	26	25.182	4.0000	0.0131	965
50.00	Coax seismic	26	17.518	3.3808	0.0099	838
46.50	Tapered 2 seismic	26	15.106	3.1405	0.0088	800
35.70	Coax seismic	26	8.864	2.3694	0.0061	703
33.20	Tapered 2 seismic	26	7.695	2.1896	0.0055	687
25.90	Tapered 3 seismic	26	4.905	1.6738	0.0040	798
21.40	Coax seismic	4	3.600	1.3635	0.0032	973
15.90	Tapered 3 seismic	14	2.338	0.9904	0.0023	1332
7.10	Coax seismic	14	0.843	0.4034	0.0009	3253
6.00	Tapered 3 seismic	14	0.685	0.3305	0.0007	3968

Base Plate Design Data

Plate Thickness in	Number of Anchor Bolts	Anchor Bolt Size in	Actual / Allowable Ratio Bolt Tension lb	Actual / Allowable Ratio Bolt Compression lb	Actual / Allowable Ratio Plate Stress ksi	Actual / Allowable Ratio Stiffener Stress ksi	Controlling Condition	Ratio
2.0000	8	2.0000	114309.89 140524.88 0.81	119314.27 233271.30 0.51	25.536 45.000 0.57		Bolt T	0.81 ✔

Fatigue Design Data

Detail Component Item No.	KI ft	KF	Δf Along-Wind ksi	Δf Vortex Shedding ksi	$\phi_{fa}\Delta F_{TH}$ ksi	Ratio

Detail Component Item No.	KI ft	KF	Δf Along-Wind ksi	Δf Vortex Shedding ksi	$\phi_{fa}\Delta F_{TH}$ ksi	Ratio
5-8	0.31	1.9786	9.160	0.000	9.383	0.9762

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
L1	103 - 101.079	TP25x18x0.1875	40.00	0.00	0.0	10.8007	-141.45	631843.00	0.000
	101.079 - 99.1579					11.0008	-6401.02	643547.00	0.010
	99.1579 - 97.2368					11.2009	-6551.77	655251.00	0.010
	97.2368 - 95.3158					11.4010	-6828.13	666956.00	0.010
	95.3158 - 93.3947					11.6010	-6983.80	678660.00	0.010
	93.3947 - 91.4737					11.8011	-7211.98	690364.00	0.010
	91.4737 - 89.5526					12.0012	-11883.70	702068.00	0.017
	89.5526 - 87.6316					12.2012	-12046.80	713772.00	0.017
	87.6316 - 85.7105					12.4013	-12212.20	725477.00	0.017
	85.7105 - 83.7895					12.6014	-12379.70	737181.00	0.017
	83.7895 - 81.8684					12.8015	-12680.60	748885.00	0.017
	81.8684 - 79.9474					13.0015	-12852.80	760589.00	0.017
	79.9474 - 78.0263					13.2016	-10476.90	772293.00	0.014
	78.0263 - 76.1053					13.4017	-10649.30	783998.00	0.014
	76.1053 - 74.1842					13.6017	-10824.10	795702.00	0.014
	74.1842 - 72.2632					13.8018	-11001.30	807406.00	0.014
	72.2632 - 70.3421					14.0019	-11181.00	819110.00	0.014
	70.3421 - 68.4211					14.2020	-11362.90	830814.00	0.014
	68.4211 - 66.5					14.4020	-11547.20	842518.00	0.014
	66.5 - 63					14.7665	-6112.65	863843.00	0.007
L2	66.5 - 63	TP31.0125x24.0125x0.1875	40.00	0.00	0.0	14.5434	-5967.23	850787.00	0.007
	63 - 61.2128					14.7295	-12270.80	861676.00	0.014
	61.2128 - 59.4256					14.9156	-12464.00	872565.00	0.014

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	lb	lb	
	59.4256 - 57.6383					15.1018	-12659.20	883453.00	0.014
	57.6383 - 55.8511					15.2879	-12856.20	894342.00	0.014
	55.8511 - 54.0639					15.4740	-13055.10	905231.00	0.014
	54.0639 - 52.2767					15.6602	-13255.80	916120.00	0.014
	52.2767 - 50.4894					15.8463	-13458.30	927009.00	0.015
	50.4894 - 48.7022					16.0324	-13662.60	937898.00	0.015
	48.7022 - 46.915					16.2186	-13868.70	948786.00	0.015
	46.915 - 45.1278					16.4047	-14076.60	959675.00	0.015
	45.1278 - 43.3406					16.5908	-14286.20	970564.00	0.015
	43.3406 - 41.5533					16.7770	-14497.50	981453.00	0.015
	41.5533 - 39.7661					16.9631	-14710.60	992342.00	0.015
	39.7661 - 37.9789					17.1492	-14925.30	1003230.00	0.015
	37.9789 - 36.1917					17.3354	-15141.80	1014120.00	0.015
	36.1917 - 34.4044					17.5215	-15359.90	1025010.00	0.015
	34.4044 - 32.6172					17.7076	-15579.70	1035900.00	0.015
	32.6172 - 30.83					17.8938	-15801.10	1046790.00	0.015
	30.83 - 26.5					18.3447	-8400.75	1073170.00	0.008
L3	30.83 - 26.5	TP35.1x29.8798x0.188	29.83	0.00	0.0	18.1696	-8233.47	1062920.00	0.008
	26.5 - 25.1579					18.3097	-16809.20	1071120.00	0.016
	25.1579 - 23.8158					18.4499	-16980.20	1079320.00	0.016
	23.8158 - 22.4737					18.5900	-17152.00	1087520.00	0.016
	22.4737 - 21.1316					18.7302	-17324.70	1095720.00	0.016
	21.1316 - 19.7895					18.8703	-17498.30	1103910.00	0.016
	19.7895 - 18.4474					19.0105	-17672.70	1112110.00	0.016
	18.4474 - 17.1053					19.1506	-17848.00	1120310.00	0.016
	17.1053 - 15.7632					19.2908	-18024.10	1128510.00	0.016
	15.7632 - 14.4211					19.4309	-18201.10	1136710.00	0.016
	14.4211 - 13.0789					19.5711	-18379.00	1144910.00	0.016
	13.0789 - 11.7368					19.7112	-18557.70	1153110.00	0.016
	11.7368 - 10.3947					19.8514	-18737.20	1161300.00	0.016
	10.3947 - 9.05263					19.9915	-18917.60	1169500.00	0.016
	9.05263 -					20.1317	-19098.80	1177700.00	0.016

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
	7.71053								
	7.71053 - 6.36842					20.2718	-19280.90	1182650.00	0.016
	6.36842 - 5.02632					20.4120	-19463.80	1186070.00	0.016
	5.02632 - 3.68421					20.5521	-19647.50	1189430.00	0.017
	3.68421 - 2.34211					20.6923	-19832.10	1192730.00	0.017
	2.34211 - 1					20.8324	-20017.50	1195960.00	0.017

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} lb-ft	ϕM_{nx} lb-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} lb-ft	ϕM_{ny} lb-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	103 - 101.079	TP25x18x0.1875	72.45	297438.33	0.000	0.00	297438.33	0.000
	101.079 - 99.1579		4176.57	307224.17	0.014	0.00	307224.17	0.000
	99.1579 - 97.2368		13648.42	317112.50	0.043	0.00	317112.50	0.000
	97.2368 - 95.3158		23456.08	327101.67	0.072	0.00	327101.67	0.000
	95.3158 - 93.3947		33582.17	337189.17	0.100	0.00	337189.17	0.000
	93.3947 - 91.4737		43962.75	347371.67	0.127	0.00	347371.67	0.000
	91.4737 - 89.5526		54602.50	357645.83	0.153	0.00	357645.83	0.000
	89.5526 - 87.6316		65781.33	368009.17	0.179	0.00	368009.17	0.000
	87.6316 - 85.7105		76961.92	378460.00	0.203	0.00	378460.00	0.000
	85.7105 - 83.7895		88140.83	388994.17	0.227	0.00	388994.17	0.000
	83.7895 - 81.8684		99588.33	399610.00	0.249	0.00	399610.00	0.000
	81.8684 - 79.9474		111217.50	410303.33	0.271	0.00	410303.33	0.000
	79.9474 - 78.0263		124390.83	421072.50	0.295	0.00	421072.50	0.000
	78.0263 - 76.1053		138960.83	431914.17	0.322	0.00	431914.17	0.000
	76.1053 - 74.1842		153663.33	442825.83	0.347	0.00	442825.83	0.000
	74.1842 - 72.2632		168495.83	453805.00	0.371	0.00	453805.00	0.000
	72.2632 - 70.3421		183458.33	464847.50	0.395	0.00	464847.50	0.000
	70.3421 - 68.4211		198549.17	475952.50	0.417	0.00	475952.50	0.000
	68.4211 - 66.5		213768.33	487115.83	0.439	0.00	487115.83	0.000
	66.5 - 63		123758.33	507595.83	0.244	0.00	507595.83	0.000
L2	66.5 - 63	TP31.0125x24.0125x0.1875	118126.67	495035.83	0.239	0.00	495035.83	0.000
	63 - 61.2128		256432.50	505506.67	0.507	0.00	505506.67	0.000
	61.2128 -		271081.67	516022.50	0.525	0.00	516022.50	0.000

Section No.	Elevation ft	Size	M_{ux} lb-ft	ϕM_{nx} lb-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} lb-ft	ϕM_{ny} lb-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	59.4256							
	59.4256 - 57.6383		285832.50	526580.00	0.543	0.00	526580.00	0.000
	57.6383 - 55.8511		300681.67	537177.50	0.560	0.00	537177.50	0.000
	55.8511 - 54.0639		315629.17	547813.33	0.576	0.00	547813.33	0.000
	54.0639 - 52.2767		330674.17	558484.17	0.592	0.00	558484.17	0.000
	52.2767 - 50.4894		345814.17	569187.50	0.608	0.00	569187.50	0.000
	50.4894 - 48.7022		361048.33	579922.50	0.623	0.00	579922.50	0.000
	48.7022 - 46.915		376376.67	590686.67	0.637	0.00	590686.67	0.000
	46.915 - 45.1278		391796.67	601476.67	0.651	0.00	601476.67	0.000
	45.1278 - 43.3406		407307.50	612290.83	0.665	0.00	612290.83	0.000
	43.3406 - 41.5533		422908.33	623126.67	0.679	0.00	623126.67	0.000
	41.5533 - 39.7661		438598.33	633982.50	0.692	0.00	633982.50	0.000
	39.7661 - 37.9789		454376.67	644855.83	0.705	0.00	644855.83	0.000
	37.9789 - 36.1917		470241.67	655744.17	0.717	0.00	655744.17	0.000
	36.1917 - 34.4044		486192.50	666645.83	0.729	0.00	666645.83	0.000
	34.4044 - 32.6172		502227.50	677558.33	0.741	0.00	677558.33	0.000
	32.6172 - 30.83		518346.67	688478.33	0.753	0.00	688478.33	0.000
	30.83 - 26.5		283780.83	714957.50	0.397	0.00	714957.50	0.000
L3	30.83 - 26.5	TP35.1x29.8798x0.188	274079.17	704610.00	0.389	0.00	704610.00	0.000
	26.5 - 25.1579		570233.33	712862.50	0.800	0.00	712862.50	0.000
	25.1579 - 23.8158		582637.50	721115.00	0.808	0.00	721115.00	0.000
	23.8158 - 22.4737		595074.17	729369.17	0.816	0.00	729369.17	0.000
	22.4737 - 21.1316		607541.67	737621.67	0.824	0.00	737621.67	0.000
	21.1316 - 19.7895		620040.83	745873.33	0.831	0.00	745873.33	0.000
	19.7895 - 18.4474		632570.83	754122.50	0.839	0.00	754122.50	0.000
	18.4474 - 17.1053		645131.67	762367.50	0.846	0.00	762367.50	0.000
	17.1053 - 15.7632		657723.33	770609.17	0.854	0.00	770609.17	0.000
	15.7632 - 14.4211		670345.83	778845.00	0.861	0.00	778845.00	0.000
	14.4211 - 13.0789		682998.33	787074.17	0.868	0.00	787074.17	0.000
	13.0789 - 11.7368		695680.83	795296.67	0.875	0.00	795296.67	0.000
	11.7368 - 10.3947		708394.17	803510.00	0.882	0.00	803510.00	0.000
	10.3947 - 9.05263		721136.67	811715.00	0.888	0.00	811715.00	0.000

Section No.	Elevation ft	Size	M_{ux} lb-ft	ϕM_{nx} lb-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} lb-ft	ϕM_{ny} lb-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	9.05263 - 7.71053		733910.00	819910.00	0.895	0.00	819910.00	0.000
	7.71053 - 6.36842		746711.67	828093.33	0.902	0.00	828093.33	0.000
	6.36842 - 5.02632		759544.17	836266.67	0.908	0.00	836266.67	0.000
	5.02632 - 3.68421		772405.00	844425.00	0.915	0.00	844425.00	0.000
	3.68421 - 2.34211		785295.83	852566.67	0.921	0.00	852566.67	0.000
	2.34211 - 1		798215.83	860700.00	0.927	0.00	860700.00	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u lb-ft	ϕT_n lb-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	103 - 101.079	TP25x18x0.1875	75.60	189553.00	0.000	0.00	301270.00	0.000
	101.079 - 99.1579		4927.31	193064.00	0.026	0.00	312534.17	0.000
	99.1579 - 97.2368		4939.24	196575.00	0.025	0.00	324005.83	0.000
	97.2368 - 95.3158		5270.37	200087.00	0.026	0.00	335684.17	0.000
	95.3158 - 93.3947		5280.12	203598.00	0.026	0.00	347569.17	0.000
	93.3947 - 91.4737		5455.78	207109.00	0.026	0.00	359660.83	0.000
	91.4737 - 89.5526		5825.82	210620.00	0.028	0.00	371960.00	0.000
	89.5526 - 87.6316		5828.42	214132.00	0.027	0.00	384465.00	0.000
	87.6316 - 85.7105		5829.36	217643.00	0.027	0.00	397176.67	0.000
	85.7105 - 83.7895		5828.71	221154.00	0.026	0.00	410095.83	0.000
	83.7895 - 81.8684		6066.65	224665.00	0.027	0.00	423220.83	0.000
	81.8684 - 79.9474		6062.89	228177.00	0.027	0.00	436553.33	0.000
	79.9474 - 78.0263		7559.92	231688.00	0.033	1259.08	450092.50	0.003
	78.0263 - 76.1053		7629.38	235199.00	0.032	1258.87	463838.33	0.003
	76.1053 - 74.1842		7698.24	238711.00	0.032	1258.65	477790.83	0.003
	74.1842 - 72.2632		7766.53	242222.00	0.032	1258.41	491950.00	0.003
	72.2632 - 70.3421		7834.30	245733.00	0.032	1258.16	506315.83	0.002
	70.3421 - 68.4211		7901.58	249244.00	0.032	1257.89	520889.17	0.002
	68.4211 - 66.5		7968.39	252756.00	0.032	1257.61	535668.33	0.002
	66.5 - 63		4191.47	259153.00	0.016	643.20	563126.67	0.001
L2	66.5 - 63	TP31.0125x24.0125x0.1875	3932.11	255236.00	0.015	614.13	546234.17	0.001
	63 - 61.2128		8183.01	258503.00	0.032	1257.05	560305.83	0.002

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u lb-ft	ϕT_n lb-ft	Ratio $\frac{T_u}{\phi T_n}$
	61.2128 - 59.4256		8239.99	261769.00	0.031	1256.73	574555.83	0.002
	59.4256 - 57.6383		8296.21	265036.00	0.031	1256.42	588985.00	0.002
	57.6383 - 55.8511		8351.72	268303.00	0.031	1256.12	603593.33	0.002
	55.8511 - 54.0639		8406.52	271569.00	0.031	1255.80	618380.83	0.002
	54.0639 - 52.2767		8460.62	274836.00	0.031	1255.49	633347.50	0.002
	52.2767 - 50.4894		8514.05	278103.00	0.031	1255.18	648492.50	0.002
	50.4894 - 48.7022		8566.82	281369.00	0.030	1254.88	663816.67	0.002
	48.7022 - 46.915		8618.94	284636.00	0.030	1254.56	679319.17	0.002
	46.915 - 45.1278		8670.43	287903.00	0.030	1254.27	695001.67	0.002
	45.1278 - 43.3406		8721.29	291169.00	0.030	1253.98	710862.50	0.002
	43.3406 - 41.5533		8771.54	294436.00	0.030	1253.70	726902.50	0.002
	41.5533 - 39.7661		8821.19	297702.00	0.030	1253.42	743120.83	0.002
	39.7661 - 37.9789		8870.25	300969.00	0.029	1253.16	759519.17	0.002
	37.9789 - 36.1917		8918.74	304236.00	0.029	1252.90	776095.83	0.002
	36.1917 - 34.4044		8966.65	307502.00	0.029	1252.65	792851.67	0.002
	34.4044 - 32.6172		9014.01	310769.00	0.029	1252.41	809785.83	0.002
	32.6172 - 30.83		9060.81	314036.00	0.029	1252.18	826899.17	0.002
	30.83 - 26.5		4741.36	321950.00	0.015	636.79	869100.00	0.001
L3	30.83 - 26.5	TP35.1x29.8798x0.188	4489.34	318876.00	0.014	615.16	850316.67	0.001
	26.5 - 25.1579		9246.37	321336.00	0.029	1251.73	863491.67	0.001
	25.1579 - 23.8158		9270.00	323795.00	0.029	1251.58	876758.33	0.001
	23.8158 - 22.4737		9293.50	326255.00	0.028	1251.43	890125.00	0.001
	22.4737 - 21.1316		9316.88	328715.00	0.028	1251.29	903600.00	0.001
	21.1316 - 19.7895		9340.12	331174.00	0.028	1251.17	917175.00	0.001
	19.7895 - 18.4474		9363.25	333634.00	0.028	1251.04	930850.00	0.001
	18.4474 - 17.1053		9386.25	336093.00	0.028	1250.93	944625.00	0.001
	17.1053 - 15.7632		9409.14	338553.00	0.028	1250.83	958500.00	0.001
	15.7632 - 14.4211		9431.92	341013.00	0.028	1250.73	972475.00	0.001
	14.4211 - 13.0789		9454.58	343472.00	0.028	1250.64	986558.33	0.001
	13.0789 - 11.7368		9477.14	345932.00	0.027	1250.57	1000733.33	0.001
	11.7368 - 10.3947		9499.59	348392.00	0.027	1250.49	1015016.67	0.001
	10.3947 -		9521.94	350851.00	0.027	1250.43	1029400.00	0.001

Section No.	Elevation ft	Size	Actual V_u lb	ϕV_n lb	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u lb-ft	ϕT_n lb-ft	Ratio $\frac{T_u}{\phi T_n}$
	9.05263							
	9.05263 - 7.71053		9544.18	353311.00	0.027	1250.38	1043883.33	0.001
	7.71053 - 6.36842		9566.33	355770.00	0.027	1250.33	1058466.67	0.001
	6.36842 - 5.02632		9588.38	358230.00	0.027	1250.30	1073150.00	0.001
	5.02632 - 3.68421		9610.33	360690.00	0.027	1250.27	1087941.67	0.001
	3.68421 - 2.34211		9632.18	363149.00	0.027	1250.26	1102833.33	0.001
	2.34211 - 1		9653.95	365609.00	0.026	1250.24	1117816.67	0.001

Pole Interaction Design Data

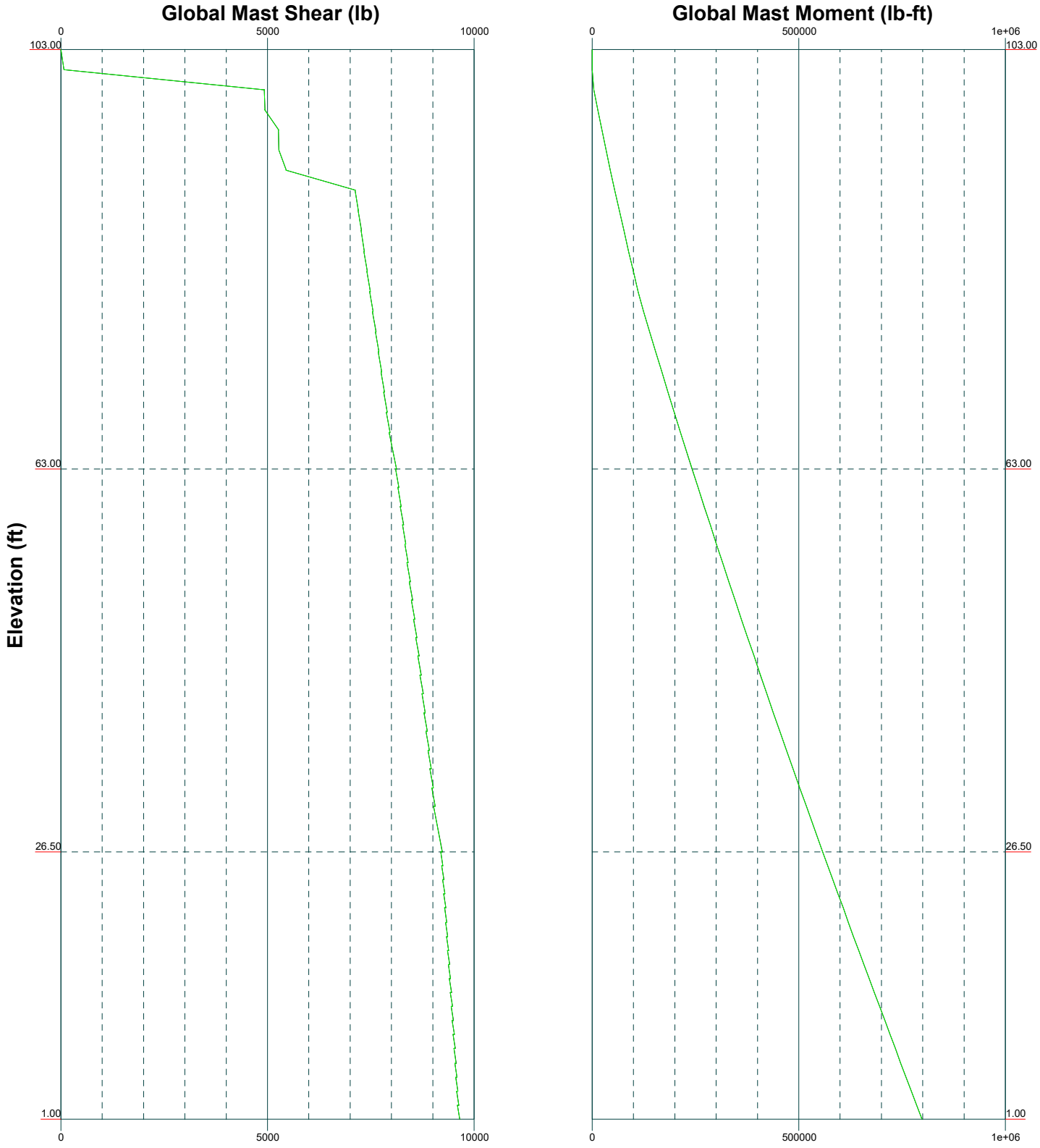
Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	103 - 101.079	0.000	0.000	0.000	0.000	0.000	0.000 ✔	1.000	✔
	101.079 - 99.1579	0.010	0.014	0.000	0.026	0.000	0.024 ✔	1.000	✔
	99.1579 - 97.2368	0.010	0.043	0.000	0.025	0.000	0.054 ✔	1.000	✔
	97.2368 - 95.3158	0.010	0.072	0.000	0.026	0.000	0.083 ✔	1.000	✔
	95.3158 - 93.3947	0.010	0.100	0.000	0.026	0.000	0.111 ✔	1.000	✔
	93.3947 - 91.4737	0.010	0.127	0.000	0.026	0.000	0.138 ✔	1.000	✔
	91.4737 - 89.5526	0.017	0.153	0.000	0.028	0.000	0.170 ✔	1.000	✔
	89.5526 - 87.6316	0.017	0.179	0.000	0.027	0.000	0.196 ✔	1.000	✔
	87.6316 - 85.7105	0.017	0.203	0.000	0.027	0.000	0.221 ✔	1.000	✔
	85.7105 - 83.7895	0.017	0.227	0.000	0.026	0.000	0.244 ✔	1.000	✔
	83.7895 - 81.8684	0.017	0.249	0.000	0.027	0.000	0.267 ✔	1.000	✔
	81.8684 - 79.9474	0.017	0.271	0.000	0.027	0.000	0.289 ✔	1.000	✔
	79.9474 - 78.0263	0.014	0.295	0.000	0.033	0.003	0.310 ✔	1.000	✔
	78.0263 - 76.1053	0.014	0.322	0.000	0.032	0.003	0.337 ✔	1.000	✔
	76.1053 - 74.1842	0.014	0.347	0.000	0.032	0.003	0.362 ✔	1.000	✔
	74.1842 - 72.2632	0.014	0.371	0.000	0.032	0.003	0.386 ✔	1.000	✔
	72.2632 - 70.3421	0.014	0.395	0.000	0.032	0.002	0.409 ✔	1.000	✔

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	70.3421 - 68.4211	0.014	0.417	0.000	0.032	0.002	0.432 ✔	1.000	✔
	68.4211 - 66.5	0.014	0.439	0.000	0.032	0.002	0.454 ✔	1.000	✔
	66.5 - 63	0.007	0.244	0.000	0.016	0.001	0.251 ✔	1.000	✔
L2	66.5 - 63	0.007	0.239	0.000	0.015	0.001	0.246 ✔	1.000	✔
	63 - 61.2128	0.014	0.507	0.000	0.032	0.002	0.523 ✔	1.000	✔
	61.2128 - 59.4256	0.014	0.525	0.000	0.031	0.002	0.541 ✔	1.000	✔
	59.4256 - 57.6383	0.014	0.543	0.000	0.031	0.002	0.558 ✔	1.000	✔
	57.6383 - 55.8511	0.014	0.560	0.000	0.031	0.002	0.575 ✔	1.000	✔
	55.8511 - 54.0639	0.014	0.576	0.000	0.031	0.002	0.592 ✔	1.000	✔
	54.0639 - 52.2767	0.014	0.592	0.000	0.031	0.002	0.608 ✔	1.000	✔
	52.2767 - 50.4894	0.015	0.608	0.000	0.031	0.002	0.623 ✔	1.000	✔
	50.4894 - 48.7022	0.015	0.623	0.000	0.030	0.002	0.638 ✔	1.000	✔
	48.7022 - 46.915	0.015	0.637	0.000	0.030	0.002	0.653 ✔	1.000	✔
	46.915 - 45.1278	0.015	0.651	0.000	0.030	0.002	0.667 ✔	1.000	✔
	45.1278 - 43.3406	0.015	0.665	0.000	0.030	0.002	0.681 ✔	1.000	✔
	43.3406 - 41.5533	0.015	0.679	0.000	0.030	0.002	0.694 ✔	1.000	✔
	41.5533 - 39.7661	0.015	0.692	0.000	0.030	0.002	0.708 ✔	1.000	✔
	39.7661 - 37.9789	0.015	0.705	0.000	0.029	0.002	0.720 ✔	1.000	✔
	37.9789 - 36.1917	0.015	0.717	0.000	0.029	0.002	0.733 ✔	1.000	✔
	36.1917 - 34.4044	0.015	0.729	0.000	0.029	0.002	0.745 ✔	1.000	✔
	34.4044 - 32.6172	0.015	0.741	0.000	0.029	0.002	0.757 ✔	1.000	✔
	32.6172 - 30.83	0.015	0.753	0.000	0.029	0.002	0.769 ✔	1.000	✔
	30.83 - 26.5	0.008	0.397	0.000	0.015	0.001	0.405 ✔	1.000	✔
L3	30.83 - 26.5	0.008	0.389	0.000	0.014	0.001	0.397 ✔	1.000	✔
	26.5 - 25.1579	0.016	0.800	0.000	0.029	0.001	0.817 ✔	1.000	✔
	25.1579 - 23.8158	0.016	0.808	0.000	0.029	0.001	0.825 ✔	1.000	✔

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	23.8158 - 22.4737	0.016	0.816	0.000	0.028	0.001	0.833 ✔	1.000	✔
	22.4737 - 21.1316	0.016	0.824	0.000	0.028	0.001	0.840 ✔	1.000	✔
	21.1316 - 19.7895	0.016	0.831	0.000	0.028	0.001	0.848 ✔	1.000	✔
	19.7895 - 18.4474	0.016	0.839	0.000	0.028	0.001	0.856 ✔	1.000	✔
	18.4474 - 17.1053	0.016	0.846	0.000	0.028	0.001	0.863 ✔	1.000	✔
	17.1053 - 15.7632	0.016	0.854	0.000	0.028	0.001	0.870 ✔	1.000	✔
	15.7632 - 14.4211	0.016	0.861	0.000	0.028	0.001	0.878 ✔	1.000	✔
	14.4211 - 13.0789	0.016	0.868	0.000	0.028	0.001	0.885 ✔	1.000	✔
	13.0789 - 11.7368	0.016	0.875	0.000	0.027	0.001	0.892 ✔	1.000	✔
	11.7368 - 10.3947	0.016	0.882	0.000	0.027	0.001	0.899 ✔	1.000	✔
	10.3947 - 9.05263	0.016	0.888	0.000	0.027	0.001	0.905 ✔	1.000	✔
	9.05263 - 7.71053	0.016	0.895	0.000	0.027	0.001	0.912 ✔	1.000	✔
	7.71053 - 6.36842	0.016	0.902	0.000	0.027	0.001	0.919 ✔	1.000	✔
	6.36842 - 5.02632	0.016	0.908	0.000	0.027	0.001	0.925 ✔	1.000	✔
	5.02632 - 3.68421	0.017	0.915	0.000	0.027	0.001	0.932 ✔	1.000	✔
	3.68421 - 2.34211	0.017	0.921	0.000	0.027	0.001	0.938 ✔	1.000	✔
	2.34211 - 1	0.017	0.927	0.000	0.026	0.001	0.945 ✔	1.000	✔

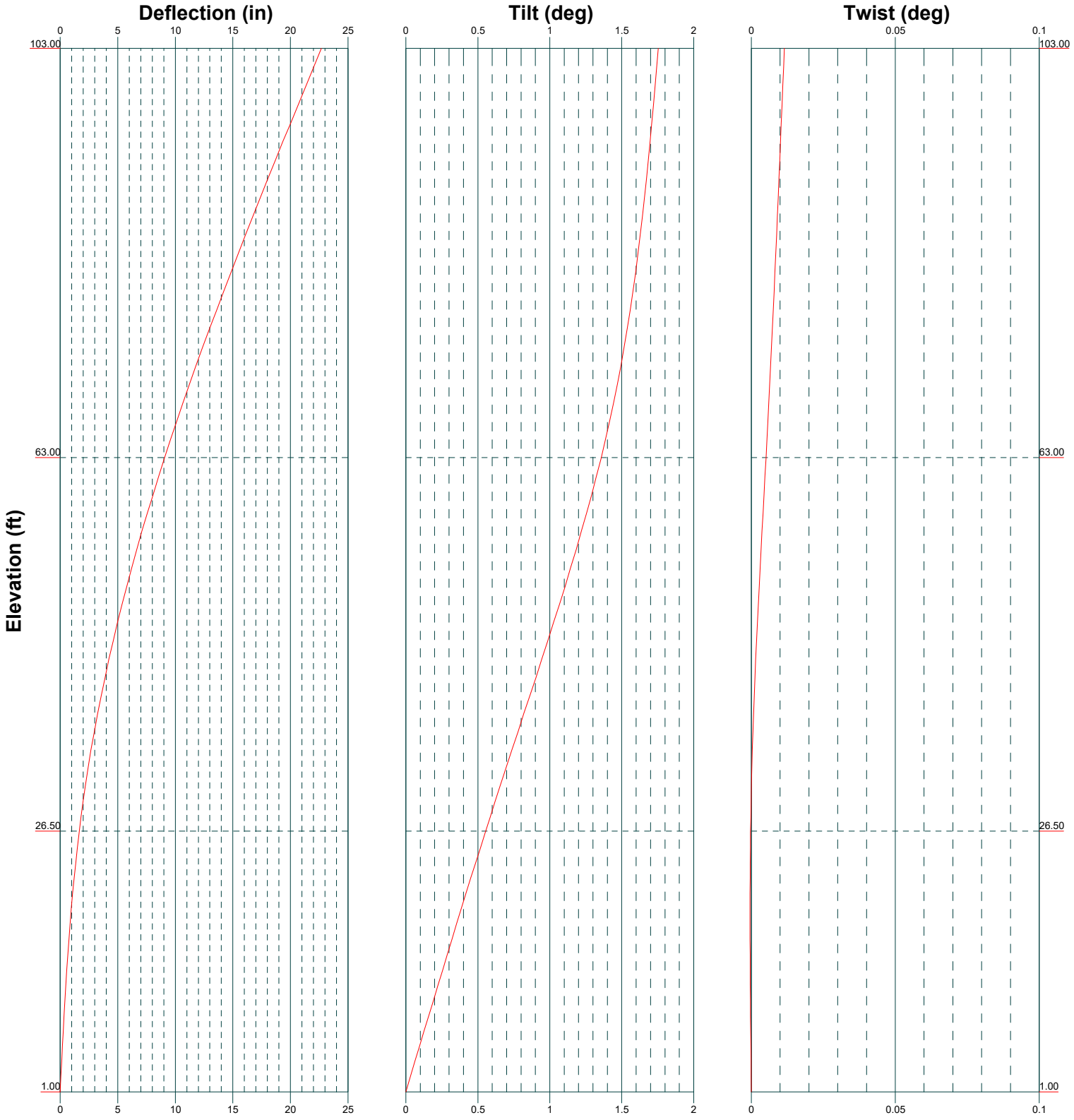
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
L1	103 - 63	Pole	TP25x18x0.1875	1	-11547.20	842518.00	45.4	Pass
L2	63 - 26.5	Pole	TP31.0125x24.0125x0.1875	2	-15801.10	1046790.00	76.9	Pass
L3	26.5 - 1	Pole	TP35.1x29.8798x0.188	3	-20017.50	1195960.00	94.5	Pass
							Summary	
						Pole (L3)	94.5	Pass
						Base Plate	81.3	Pass
						Fatigue	97.6	Pass
						RATING =	**97.6**	**Pass**



Vector Structural Engineering
651 W Galena Park Blvd
Draper, UT 84020
Phone: (801) 990-1775
FAX: (801) 990-1776

Job: ***SF Police Academy***		
Project: ***U1133.0725.261***		
Client: Steelhead	Drawn by: mririe	App'd:
Code: TIA-222-I	Date: 01/27/26	Scale: NTS
Path:		Dwg No. E-4



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651 W Galena Park Blvd
Draper, UT 84020
Phone: (801) 990-1775
FAX: (801) 990-1776

Job: ***SF Police Academy***		
Project: ***U1133.0725.261***		
Client: Steelhead	Drawn by: mririe	App'd:
Code: TIA-222-I	Date: 01/27/26	Scale: NTS
Path:		Dwg No. E-5

JOB NO.: U1133.0725.261
SUBJECT: Appurtenance Mounting Systems (TIA-222-I Chapter 16)

PROJECT: SF POLICE ACADEMY

Three-Sided Friction Collars:

Structure Type:	Monopole		

Monopole Inputs:

Tubular Pole Yield Strength, F_y:	65	ksi	
Tubular Pole Shaft Thickness, t:	0.1875	in	
Tubular Pole Shaft Diameter, D:	20.28	in	(worst case)

Collar Mount & Threaded Rod Inputs:

Collar Mount Bearing Type:	Horizontal		
Width Between Collar Outside Bearing Points on Tubular Pole Shaft, B_p:	4.00	in	
Height of Collar, hv:	9.6	in	
Horizontal Width Between Attachments of Threaded Rods at Weldment, wt:	16.2	in	
Vertical Levels of Threaded Rods:	3		
Threaded Rod Grade:	A307		
Threaded Rod Diameter:	0.625	in	

Loading:

Applied moment about horizontal axis of weldment, Mh:	23.27	k-in	

Threaded Rod Checks:
Collars utilizing three vertical levels of threaded rods:

Vertical Location of Top Threaded Rod, s_1:	7.3	in	(TIA-222-I §16.5.1)
Vertical Location of Middle Threaded Rod, s_2:	5	in	(TIA-222-I §16.5.1)
Vertical Location of Bottom Threaded Rod, s_3:	2.5	in	(TIA-222-I §16.5.1)
Centroid of Threaded Rod Group, y:	6.5	in	(TIA-222-I §16.5.1)
Weldment Bearing Ratio, ß:	0.247104		
Tension offset, δ:	6.2	in	(TIA-222-I §16.5.1)
Tensile Force in Top Threaded Rod, T_1:	13.4	k	(TIA-222-I §16.5.1)
Tensile Force in Middle Threaded Rod, T_2:	7.8	k	(TIA-222-I §16.5.1)
Tensile Force in Bottom Threaded Rod, T_3:	2.6	k	(TIA-222-I §16.5.1)
Threaded Rod Capacity:	31.1	k	(AISC 360 Eq. J3-1)
Check Threaded Rod:	43%		

Result: **(3) Ø0.625 in. A307 threaded rods are adequate to resist the proposed loading.**

Notes:

Monopole Localized Plastification Checks:

Horizontally Oriented Compression Zone:

Local Plastification of Tubular Pole shaft, R_n:	14.96	k	(TIA-222-I §16.5.1)
Pole Shaft Capacity, ϕR_n:	13.46	k	(TIA-222-I §16.5.1)
Demand on Pole Shaft:	2.43	k	
Local Plastification Check:	18%		

Result: **Pole shaft is adequate.**

Notes:

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JOB NO.: U1133.0725.261
SUBJECT: Appurtenance Mounting Systems (TIA-222-I Chapter 16)

PROJECT: SF POLICE ACADEMY

Location: Monopole
On a: pole structure at 100 ft A.G.L.

Wind per: TIA-222-I
Seismic per: TIA-222-I

Appurtenances	Quintel QD668-2	Ericsson Air 6419 B77G + B77D	Quintel QD6612-2	RRU 4490 B5/B12A	RRU 4478 B14	RRU 4890 B2/B66	Raycap					Worst Case Loading Per Mount Pipe
Antenna Mount Pipe Location:	1	2	3									
Unit Weight (lbs)	55.5	161.4	120.9	70.0	60.0	69.5	26.2					161.4
Quantity	1	1	1	1	1	1	1					
Height (Y) (in)	72	56.6	72	20.6	18.1	20.6	31.3					
Width/Diameter (X) (in)	18.1	16.1	22	15.6	13.4	15.7	11					
Depth (Z) (in)	9.6	7.9	9.6	7	8.26	7.2						
Shape:	Flat	Flat	Flat	Flat	Flat	Flat	Round					
Wind Force per Unit:												
$(EPA)_N$ (ft^2)	11.45	7.88	13.58	2.68	2.02	2.70	1.21					
$(EPA)_T$ (ft^2)	6.80	4.36	6.80	1.22	1.25	1.25	1.21					
Factored (LRFD): (1.0W)												
Normal Force $(K_a*q_z*G_h*(EPA)_N)$	301.9	207.6	357.8	70.6	53.3	71.0	32.0					357.8
Tangential Force $(K_a*q_z*G_h*(EPA)_T)$	179.2	115.0	179.2	32.2	32.8	33.0	32.0					179.2
Seismic Force per Unit:												
Factored (LRFD): (1.0E)												
Lateral (lbs)	54.1	157.4	117.9	68.3	58.5	67.8	25.5					157.4
Vertical (lbs)	14.4	42.0	31.4	18.2	15.6	18.1	6.8					42.0

Dead Load, D:

Weight of Structure:	W_S = 1229	lb	(1.05 x Material Weight from RISA Model)
Weight of Appurtenances:	W_A = 564	lb	
Total Weight:	W_p = 1793	lb	

Wind Load, W: (TIA-222-I, Section 2.6: Wind and Ice Loads)

Basic Wind Speed:	V = 99	mph	(ASCE 7 Online Hazard Tool Lookup - ASCE 7-22)
Exposure Category:	C		(TIA-222-I §2.6.5.1.2)
Topographic Feature:	Flat		(TIA-222-I §2.6.6.2)
Crest Height:	H = N/A	ft	(TIA-222-I §2.6.6)
Gust Effect Factor:	G_h = 1		(TIA-222-I §16.6)
Shielding Factor:	K_a = 0.9		(TIA-222-I §16.6)
Velocity Pressure Coefficient:	K_z = 1.25		(TIA-222-I §2.6.5.2)
Topographic Factor:	K_{zt} = 1.00		(TIA-222-I §2.6.6.2.1)
Rooftop Wind Speed-Up Factor:	Ks = 1.00		(TIA-222-I §2.6.7)
Ground Elevation Factor:	K_e = 0.98		(TIA-222-I §2.6.8)
Directionality Factor:	K_d = 0.95		(TIA-222-I §16.6)
Velocity Pressure:	q_z = 29.3	psf	(TIA-222-I §2.6.11.6)
Open Structure Wind Pressure:	35.1	psf	(qz x CF x Gh) (TIA-222-I §2.6.11.1)

Total Factored X-Direction Wind (Appurt. & Structure):	F_{WX} = 1094	lb
Total Factored Z-Direction Wind (Appurt. & Structure):	F_{WZ} = 603	lb

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JOB NO.: U1133.0725.261
SUBJECT: Appurtenance Mounting Systems (TIA-222-I Chapter 16)

PROJECT: SF POLICE ACADEMY

Seismic Load, E: (ASCE 7, Section 13.3: Seismic Demands on Non-Structural Components)

Risk Category / Structure Class:		III		
Seismic Design Category:		D		
Component Importance Factor:	I_p =	1.25		(TIA-222-I §2.7.8)
Site Class:		0		
Mapped Spectral Response Acc. Parameter (Short Periods):	S_s =	1.840		(ASCE 7 §11.4.1)
Mapped Spectral Response Acc. Parameter (1 s Period):	S_1 =	0.700		(ASCE 7 §11.4.1)
Design Spectral Response Acc. Parameter (Short Periods):	S_{DS} =	1.300		(ASCE 7 §11.4.4)
Design Spectral Response Acc. Parameter (1 s Period):	S_{D1} =	1.380		(ASCE 7 §11.4.4)
Component Response Modification Factor:	R_p =	2.0		(TIA-222-I §16.7)
Component Amplification Factor:	a_p =	1.2		(TIA-222-I §2.7.9)
Overstrength Factor (req'd for anchorage to concrete):	Ω_o =	1.5		(TIA-222-I §2.7.10)
Lateral Seismic Design Force Weight Multiplier:	F_p/W =	0.975		(TIA-222-I §2.7.8)
Vertical Seismic Design Force Weight Multiplier:	F_v/W =	0.260		(TIA-222-I §2.7.8)
Unfactored X-Direction Seismic Design Force:	F_p,x =	1748	lb	(TIA-222-I §2.7.8)
Unfactored Z-Direction Seismic Design Force:	F_p,z =	1748	lb	(TIA-222-I §2.7.8)
Unfactored Vertical Seismic Design Force:	F_v =	466	lb	(TIA-222-I §2.7.8)
Total Factored (LRFD) X-Dir Seismic Design Force:	1.0*F_p,x =	1748	lb	**Seismic Controls**
Total Factored (LRFD) Z-Dir Seismic Design Force:	1.0*F_p,z =	1748	lb	**Seismic Controls**
Total Factored (LRFD) Vertical Seismic Design Force:	1.0*F_v =	466	lb	

Ice Load, Di & Wi: (TIA-222-H, Section 2.6.10: Design Ice Thickness)

Does Ice Need to be Considered?:		No		
Design Ice Thickness:	t_i =	0	in	(ASCE 7 Online Hazard Tool Lookup - ASCE 7-22)

Live Loads, L:

Maintenance Load at Mount Pipe:	L_M =	500	lbs	(TIA-222-I, Section 16.3) - Apply at worst-case mount pipe
Maintenance Load at Center of Horizontal Beam:	L_V =	250	lbs	(TIA-222-I, Section 16.3) - Apply for beam supported at each end
Area Load:		N/A	psf	
Affected Area:		N/A	ft^2	

Snow Loads, S_s:

Design Roof Snow Load:	S =	N/A	psf	(ASCE 7, Chapter 7)

Summary:

Vertical Loads Controlled By:	**"1.2 Dead + 1.5 LM" Load Combo**
X-Direction Horizontal Loads Controlled By:	**Seismic Load Combos**
Z-Direction Horizontal Loads Controlled By:	**Seismic Load Combos**

Demand Classification:	M375R(175)-3[6]	(Classification per TIA-5053-A)	
Mount Manufacturer Classification:	M1300R(1300)-4[6]	(Classification per TIA-5053-A)	(See attached manufacturer report)

Result: Mount is adequate to support the proposed design loading

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PROJECT: SF Police Academy

DESIGN APPROACH: LRFD

Port Fatigue Checks Description: Upper Ports

Elevation AGL (ft):	90
Max axial load (k):	0.0
Max moment demand (k-ft):	7.9
Pole Dia (in):	20.275
Pole Thickness (in):	0.1875
Port Projection (in):	0.5

Location	$\phi_{fa}\Delta F_{TH}$ (ksi)	Ag (in^2)	I (in^4)	y (in)	Δf (ksi)	Check
Top, Pole	7	10.8	454.1	10.1	0.2	3%
Center, Pole & Port	16	13.4	562.9	10.6	0.1	1%
Bottom, Pole	7	10.8	454.1	10.1	0.2	3%

Result: Okay, adequate

Note: Using ultimate reactions *(1.0 Gh * 5 psf fatigue wind pressure)/(0.95 ultimate Gh * 29 psf ultimate wind pressure)

Port Fatigue Checks Description: Lower Ports

Elevation AGL (ft):	3
Max axial load (k):	0.0
Max moment demand (k-ft):	137.3
Pole Dia (in):	34.75
Pole Thickness (in):	0.1875
Port Projection (in):	0.5

Location	$\phi_{fa}\Delta F_{TH}$ (ksi)	Ag (in^2)	I (in^4)	y (in)	Δf (ksi)	Check
Top, Pole	7	20.4	3040	17.4	0.0	1%
Center, Pole & Port	16	24.7	4132	17.9	0.0	0%
Bottom, Pole	7	20.4	3040	17.4	0.0	1%

Result: Okay, adequate

Note: Conservativley using overturning moment from fatigue loads at base of monopole.

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PROJECT: SF Police Academy

Anchor Fatigue Checks Description: Foundation Anchors

Uplift (k):	0	
Overturning Moment (k-ft)	137.3	tnxTower Along-Wind Gust Tower Force Section
Number of anchors, n:	8	
Bolt Circle (in)	41.0	
Anchor correction factor, nc:	1.05	TIA-222-I Annex Q5.0
Max Anchor Tension (k):	21.1	
Anchor Dia. (in):	2	
Net Tensile A (in^2):	2.50	AISC Part 1, Table 7-17
Δf (ksi):	8.4	
$\phi_{fa}\Delta F_{TH}$ (ksi):	10	
Check	84%	

$$P_u = \left[\frac{(n_c)(\pi)(M_u)}{n(D_{BC})} + \frac{R_u}{n}\right]$$

Result: **Okay, adequate**

Note:

U-Bolt Fatigue Checks Description: Site Pro 1 SP219 - Antenna mount pipe to cross arm

q_{wg} (psf):	5.0	
V (mph):	44.2	
Gh:	1	
Max EPA @ Antenna Mount Pipe (ft^2):	16.6	
U-bolt ends resisting:	8	
Tension per U-Bolt end, Fa (lb):	10.4	
U-Bolt Dia (in):	0.5	
Net Tensile A (in^2):	0.14	AISC Part 1, Table 7-17
Δf (ksi):	0.1	
$\phi_{fa}\Delta F_{TH}$ (ksi):	7	
Check	1%	

Result: **Okay, adequate**

Note:

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PROJECT: SF Police Academy

U-Bolt Fatigue Checks Description: RMVD12 Dual T-arm Kit - Cross arm to standoff

q_{wg} (psf):	5.2	
V (mph):	44.9	
Gh:	1	
Max EPA per sector (ft^2):	41.5	
U-bolt ends resisting:	8	
Tension per U-Bolt end, Fa (lb):	26.8	
U-Bolt Dia (in):	0.625	
Net Tensile A (in^2):	0.23	AISC Part 1, Table 7-17
Δf (ksi):	0.1	
$\phi_{fa}\Delta F_{TH}$ (ksi):	7	
Check	2%	

Result: **Okay, adequate**

Note:

Bolt Fatigue Checks Description: RMVD12 Dual T-arm Kit - Cross arm to standoff

q_{wg} (psf):	5.2	
V (mph):	44.9	
Gh:	1	
Max EPA per sector (ft^2):	41.5	
Bolts:	8	
Tension per Bolt, Fa (lb):	26.8	
Bolt Dia (in):	0.5	
Net Tensile A (in^2):	0.14	AISC Part 1, Table 7-17
Δf (ksi):	0.2	
$\phi_{fa}\Delta F_{TH}$ (ksi):	7	
Check	3%	

Result: **Okay, adequate**

Note:

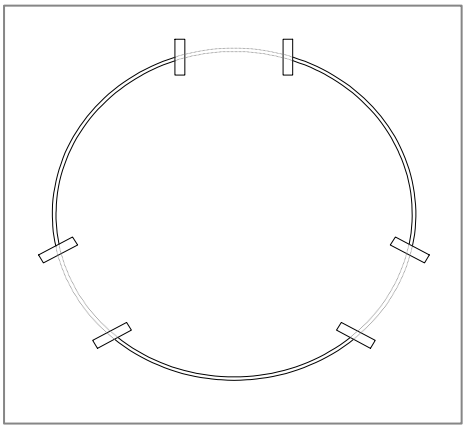
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PROJECT: SF POLICE ACADEMY

Port Design:



Label: Ports at 100 ft A.G.L.

Geometry Input

Elevation of Port, AGL	100.00	ft
Pole Diameter	18.525	in
Pole Thickness	0.1875	in
Pole Yield Strength	65	ksi
Pole Unit Tensile Strength	11.0	k/in
Weld Filler Strength:	70	ksi
Required Fillet Weld:	3/8	in
Reinforcing Rim Yield Strength	50	ksi
# of Ports	3	

	Port 1	Port 2	Port 3
Azimuth (°)	0	120	240
Height (in)	12	12	12
Width (in)	6	6	6
Depth (in)	2	2	2
Thickness (in)	0.5	0.5	0.5
Projection (in)	0.5	0.5	0.5
Reinforcing Area (in^2)	2	2	2
Pole Area Removed (in^2)	1.15	1.15	1.15
Dist. From Center to Reinf. (in)	8.7625	8.7625	8.7625
Area Check	**74.5%**	**74.5%**	**74.5%**
MOI Check	**78.0%**	**78.0%**	**78.0%**
Individual Port Weights (lbs)	10	10	10
Reduction in Pole Weight (lbs)	12		
Total Port Weight (lbs)	19		

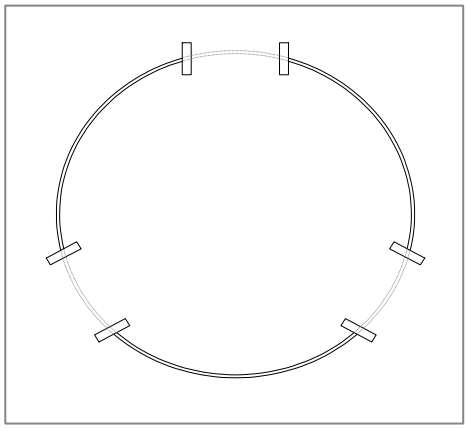
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PROJECT: SF POLICE ACADEMY

Port Design:



Label: Ports at 90 ft A.G.L.

Geometry Input

Elevation of Port, AGL	90.00	ft
Pole Diameter	20.275	in
Pole Thickness	0.1875	in
Pole Yield Strength	65	ksi
Pole Unit Tensile Strength	11.0	k/in
Weld Filler Strength:	70	ksi
Required Fillet Weld:	3/8	in
Reinforcing Rim Yield Strength	50	ksi
# of Ports	3	

	Port 1	Port 2	Port 3
Azimuth (°)	0	120	240
Height (in)	12	12	12
Width (in)	6	6	6
Depth (in)	2	2	2
Thickness (in)	0.5	0.5	0.5
Projection (in)	0.5	0.5	0.5
Reinforcing Area (in^2)	2	2	2
Pole Area Removed (in^2)	1.14	1.14	1.14
Dist. From Center to Reinf. (in)	9.6375	9.6375	9.6375
Area Check	**74.3%**	**74.3%**	**74.3%**
MOI Check	**77.4%**	**77.4%**	**77.4%**
Individual Port Weights (lbs)	10	10	10
Reduction in Pole Weight (lbs)	12		
Total Port Weight (lbs)	19		

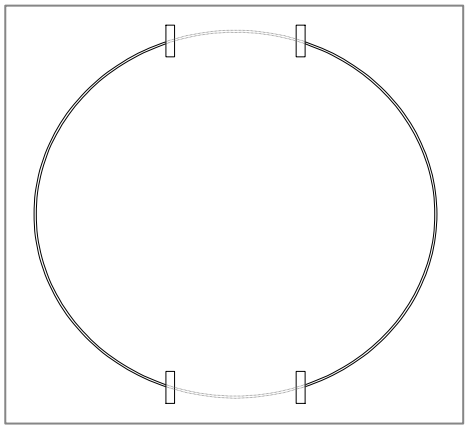
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PROJECT: SF POLICE ACADEMY

Port Design:



Label: Ports at 3 ft A.G.L.

Geometry Input

Elevation of Port, AGL	3.00	ft
Pole Diameter	34.75	in
Pole Thickness	0.1875	in
Pole Yield Strength	65	ksi
Pole Unit Tensile Strength	11.0	k/in
Weld Filler Strength:	70	ksi
Required Fillet Weld:	3/8	in
Reinforcing Rim Yield Strength	50	ksi
# of Ports	2	

	Port 1	Port 2
Azimuth (°)	0	180
Height (in)	25	25
Width (in)	12	12
Depth (in)	3	3
Thickness (in)	0.75	0.75
Projection (in)	0.5	0.5
Reinforcing Area (in^2)	4.5	4.5
Pole Area Removed (in^2)	2.30	2.30
Dist. From Center to Reinf. (in)	16.375	16.375
Area Check	**66.4%**	**66.4%**
MOI Check	**70.1%**	**70.1%**
Individual Port Weights (lbs)	47	47
Reduction in Pole Weight (lbs)	33	
Total Port Weight (lbs)	62	

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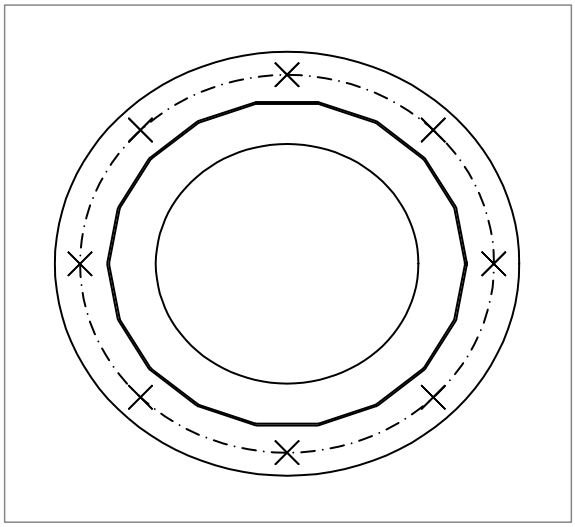
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PROJECT: SF POLICE ACADEMY

Monopole Baseplate & Anchorage Design per TIA-222-H Annex Q & TIA-222-H Section 4.9.9

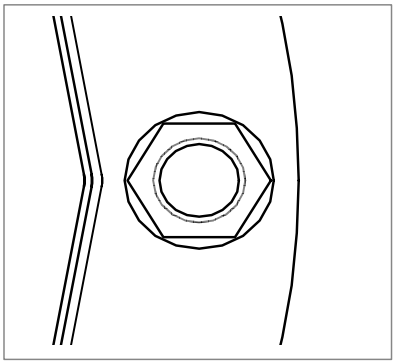
	Quantity	Symbol	Value	Units
Basic Input & Geometry	Number of sides		18	
	Flat O.D.	D_T	35.10	in
	Pole wall thickness	t_T	0.1875	in
	Pole yield strength	F_{yp}	65	ksi
	Bend Radius		0.75	in
	Base plate fillet weld size		0.25	in
	Anchor diameter	d	2	in
	Number of anchors	n	8	
	Anchor grade		F1554-55	
	Base plate thickness	t_{TP}	2	in
	Base plate yield strength	F_{yf}	50	ksi
	Anchor hole diameter		2.3125	in
	Slotted to outside edge?		Yes	
	Flat washer diameter		3.75	
	Zinc drain hole diameter		2.3125	
	Zinc drain circle		31	in
	Bolt circle diameter	D_{BC}	41	in
	Plate O.D.	D_{OD}	46	in
	Plate I.D.		26	in

Base Plate Illustration



			Wind		Seismic	
LRFD Loads	Axial down	$R_{u,c}$	20.03	k	21.33	k
	Axial up	$R_{u,t}$	0	k	0.00	k
	Shear	V_u	9.64	k	5.35	k
	Moment	M_u	798.22	k-ft	524.17	k-ft
	Member mom. capacity	ΦM_n	871	k-ft		

Fit Check



Checks	Plate stress ratio	**66.4%**	OK	
	Anchor unity check	**80.5%**	OK	
	Min. number of sides	18	OK	6 minimum
	Min. number of anchors	8	OK	8 minimum
	Max. anchor rod to pole distance	2.83"	OK	12" maximum
	Min. anchor diameter	2"	OK	0.75" minimum
	Max. anchor rod spacing	16.1"	NG	12" maximum
	Min. anchor rod spacing	15.69"	OK	6" minimum
	Min. base plate thickness	2"	OK	1.75" minimum
	Min. inside diameter	26"	OK	10.53" minimum
	Max. inside diameter	26"	OK	30.75" maximum

Note: when number of anchors is less than minimum and when maximum anchor rod spacing is exceeded, adjustments are made to the effective plate width calculations as if requirements of TIA-222-H Annex Q were met.

Check:	Dist.	Result
Washer vs weld	0.4125	OK
Washer vs OD	0.4688	OK
Washer covers hole	0.5625	OK

JOB NO.: U1133.0725.261

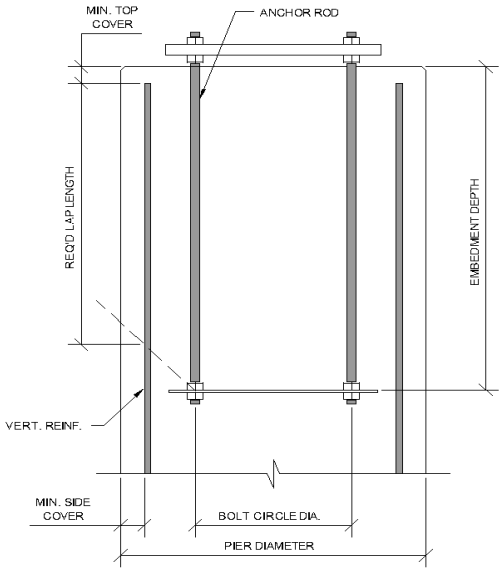
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PROJECT: SF POLICE ACADEMY

Anchorage Embedment Design

(per ACI 318-19)

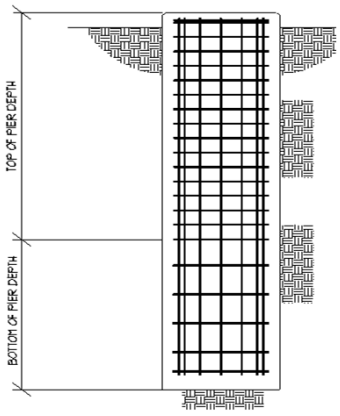
Vertical Bar Size:	#8	
# of Vertical Bars:	24	
Concrete Compressive Strength [psi]:	4000	
Pier Diameter [ft]:	5.5	
Pier Depth [ft]:	50	
Top of Pier Elevation [in]:	6	
Concrete Volume [yd^3]:	44.4	
Side Concrete Cover [in]:	4	
Top Concrete Cover [in]:	2	
Horizontal Tie Size:	#4	
Bolt Circle Diameter [in]:	41	
# of Anchor Rods:	8	
Anchor Rod Diameter [in]:	2.00	
ψ_t (bar location factor):	1.0	Table 25.4.2.4
ψ_e (epoxy coating factor):	1.0	Table 25.4.2.4
ψ_s (bar size factor):	1.0	Table 25.4.2.4
λ (concrete type factor):	1.0	Table 25.4.2.4
Vertical Bar Diameter [in]:	1.0	
Horizontal Tie Diameter [in]:	0.500	
Buffer [in]:	0.88	
Req'd Lap Length [in]:	37.0	in (Section 25.4.2.2)
Min. Req'd Embedment Depth [in]:	**46.5**	



Transverse Reinforcement Design

See IBC Sections 1810.3.9.4.1 and 1810.3.9.4.2

Seismic Design Category:	D
Apply Seismic Detailing?	Yes
Site Class:	D
Type of Transverse Reinforcement:	Spiral
Transverse f_{yt} [ksi]:	60
Seismic Hooks Required?	Yes
Tie Size OK?	Yes
Spacing at Top of Pier [in]:	3
Spacing at Bottom of Pier [in]:	12
Total Pier Length [ft]:	50.5
Top Pier Length [ft]:	16.5
Bottom Pier Length [ft]:	34



JOB NO.: U1133.0725.261

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Project: SF POLICE ACADEMY

Drilled Pier Design:

Applied Loads:

Max. shear, V:	12.8	k	Design methodology:	LRFD
Max. moment, M:	1,064.3	k-ft	Maximum foundation rating:	100%
Max. down, P_{down}:	26.7	k		
Max. uplift, P_{uplift}:	0.0	k		

Pier Properties:

Pier shape	Round		Volume of concrete:	1200	ft^3
Pier diameter, b:	5.5	ft	Volume of concrete:	44.4	yd^3
Min. pier diameter, bmin (opt'l):	0.0	ft	Weight of concrete:	180.0	k
b:	5.5				
Top of pier elevation:	0.5	ft			
Pier depth, d:	50	ft			
Min. pier depth, d_{min} (opt'l):	50.0	ft			

Soil Properties & Analysis:

Allow. bearing pressure:	0	psf	F.S.: 1
Gross or net?	Net		
1/3 increase for short term loads?	No		
Skin friction (down):	500	psf	F.S.: 2
Skin friction (uplift):	300	psf	F.S.: 2
Top length to ignore:	2	ft	
1/3 increase for short term loads?	Yes		
Combine skin friction & end bearing?	Yes		
Bearing capacity:	1,105.8	k	
Uplift capacity:	825.5	k	

Results:

Bearing capacity OK.
Uplift capacity OK.

Lateral analysis in LPile

JOB NO.: U1133.0725.261

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PROJECT: SF Police Academy

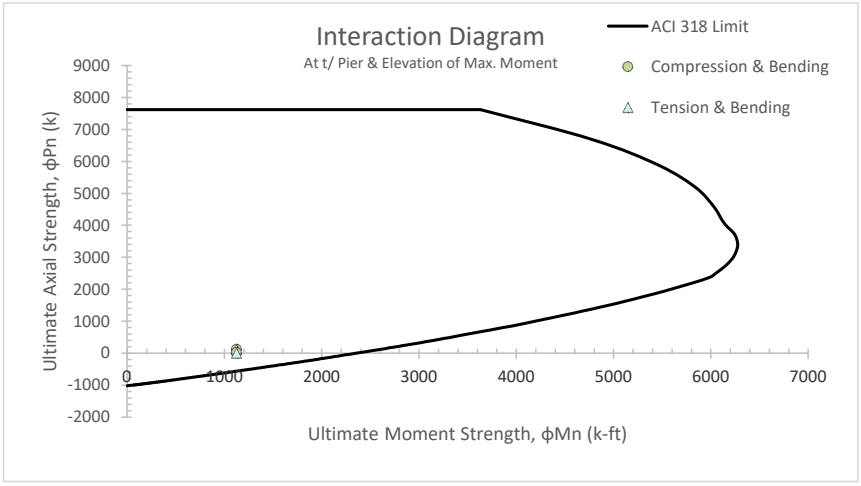
Drilled Pier Reinforcement:

Design Requirements:

Max. Moment, M (k-ft):	798.2	Max. Down, P_{down} (k):	20.0	Required Foundation UC Limit:	100%
Max. Shear, V (k):	9.6	Max. Uplift, P_{up} (k):	0.0	Mu, M+V*H+Pmax*E (k-ft):	1124.3
Height of V (ft):	33.833	Eccentricity for P (in):	0	(Uplift is negative for comparison w/	
		Concrete Self-weight (k):	116.6 (0.145 pcf)	Interaction Diagram)	

Pier Properties:

Code Reference:	ACI 318-19	
Pier Diameter (ft):	5.5	
Top of Pier Elevation (in):	6	
Pier Depth (ft):	50	
Vertical Bar Size:	#8	
Bar Diameter (in):	1	
Bar Area (in^2):	0.79	
Seismic Design Category:	D	
# of Vertical Bars:	24	
Vert. Yield Strength (psi):	60000	
Horizontal Reinf. Type:	Spiral	
Horizontal Reinf. Size:	#4	
Horizontal Reinf. Diameter (in):	0.5	
Side Concrete Cover (in):	4	
Vert. Edge Distance (in):	4.5	
Conc. Comp. Strength, f'c (psi):	4000	
Angle Between Bars, δ (radians):	0.262	
Area of Steel (in^2):	19.0	
Gross Column Area (in^2):	3421.2	
Min. Reinforcement Ratio:	0.50%	(IBC Sections 1810.3.9.4.1 and 1810.3.9.4.2)
β_1:	0.85	Table 22.2.2.4.3
Concrete Yield Strain, ε_{cu} (in/in):	0.003	Section 22.2.2.1
P_o (k):	12705	Eqn. 22.4.2.2
ϕ:	0.75	Table 21.2.2
Pn Factor:	0.80	Table 22.4.2.1
ϕP_u (pure compression, k):	7623	
Es (ksi):	29000	
Steel Yield Strain, ε_{ty} (in/in):	0.002069	Section 21.2.2.1
Number of verticals in top row:	1	



Axial & Bending Checks:

Steel/Concrete Ratio: 0.55% **> Min. Reinf. Ratio**

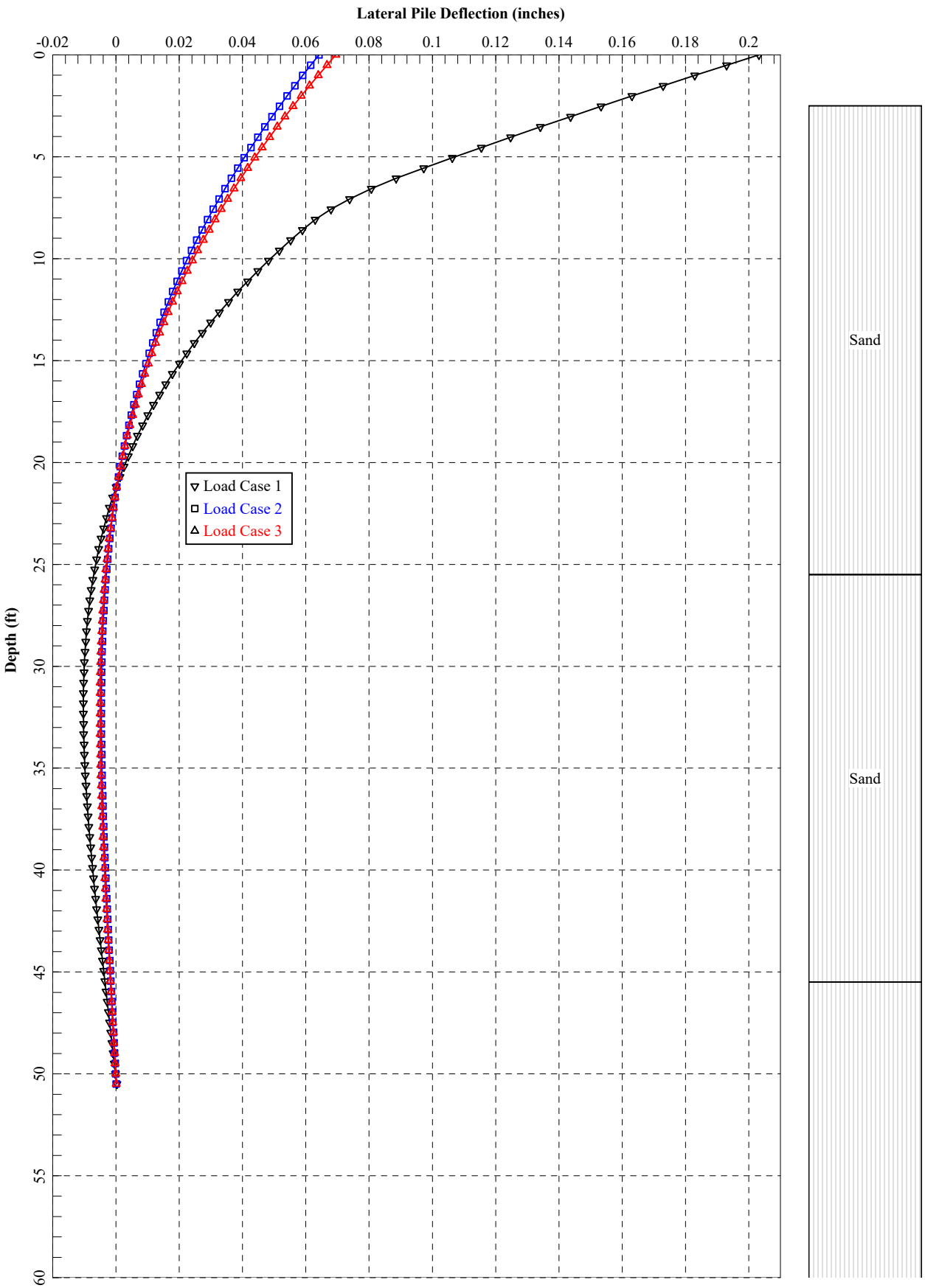
Compression & Bending

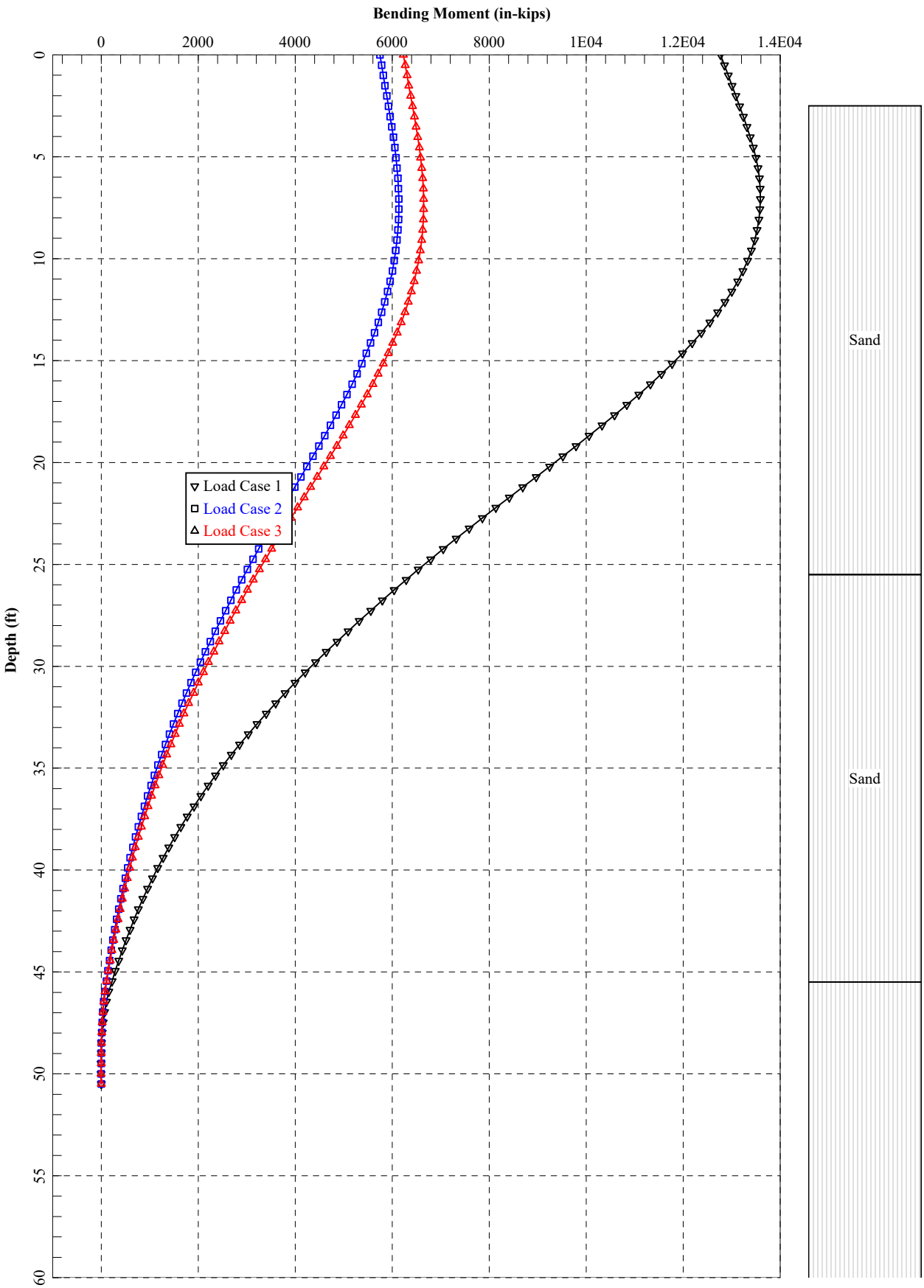
	@ t/ Pier	@ Max. M		
ϕPn (k):	15.0	119.9		
ϕMn (k-ft):	2390.0	2604.1		
UC:	47.0%	43.4%	**OK, Adequate**	$(Pu^2+Mu^2)^{0.5}/(\phi Pn^2+\phi Mn^2)^{0.5}$

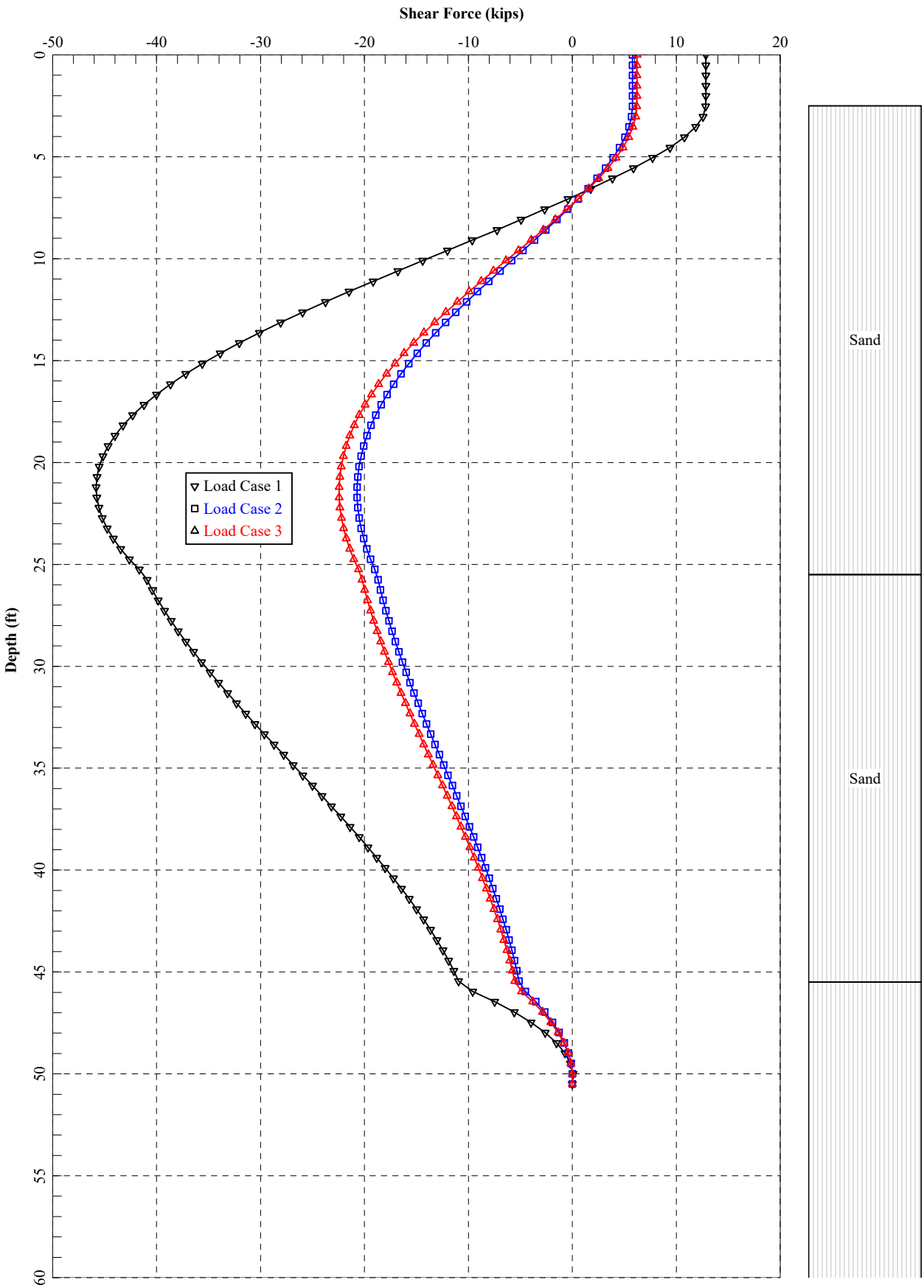
Tension & Bending

	@ t/ Pier	@ Max. M		
ϕPn (k):	0.0	104.9		
ϕMn (k-ft):	2359.0	2573.6		
UC:	47.7%	43.8%	**OK, Adequate**	$(Pu^2+Mu^2)^{0.5}/(\phi Pn^2+\phi Mn^2)^{0.5}$

LOAD CASE 1: LRFD LOADS/0.75; DEFLECTION LIMIT ~ 6"
LOAD CASE 2: ASD LOADS; DEFLECTION LIMIT = 1"
LOAD CASE 3: SERVICE LOADS * 2.0 F.S.; DEFLECTION LIMIT = 3/4"




Bending Moment (in-kips)
0
2000
4000
6000
8000
1E04
1.2E04
1.4E04
Depth (ft)
0
5
10
15
20
25
30
35
40
45
50
55
60
Load Case 1
Load Case 2
Load Case 3
Sand
Sand


Shear Force (kips)
-50
-40
-30
-20
-10
0
10
20
Depth (ft)
0
5
10
15
20
25
30
35
40
45
50
55
60
Load Case 1
Load Case 2
Load Case 3
Sand
Sand

```
================================================================================

                    LPile for Windows, Version 2019-11.001

                Analysis of Individual Piles and Drilled Shafts
               Subjected to Lateral Loading Using the p-y Method
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================================================================================

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MAR
VSE

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--------------------------------------------------------------------------------
                            Files Used for Analysis
--------------------------------------------------------------------------------

Path to file locations:
\\VSEFILES.vector.local\Projects\2026 Projects\U1133 Steelhead Metal & Fab LLC\U1133-0725-261
SF Police Academy (CA, monopole rev I)\ENG\

Name of input data file:
lpileInputFile.lp11

Name of output report file:
lpileInputFile.lp11

Name of plot output file:
lpileInputFile.lp11

Name of runtime message file:
lpileInputFile.lp11



--------------------------------------------------------------------------------
                          Date and Time of Analysis
--------------------------------------------------------------------------------

               Date:  January 28, 2026           Time:  14:33:52



--------------------------------------------------------------------------------
```

```
                                  Problem Title
--------------------------------------------------------------------------------

Project Name: SF Police Academy


Job Number: U1133.0725.261


Client: Steelhead Metal & Fab LLC


Engineer: Draper


Description:




--------------------------------------------------------------------------------
                          Program Options and Settings
--------------------------------------------------------------------------------

Computational Options:
 - Use unfactored loads in computations (conventional analysis)
Engineering Units Used for Data Input and Computations:
 - US Customary System Units (pounds, feet, inches)

Analysis Control Options:
 - Maximum number of iterations allowed                =          500
 - Deflection tolerance for convergence                =   1.0000E-05 in
 - Maximum allowable deflection                        =     100.0000 in
 - Number of pile increments                           =          100

Loading Type and Number of Cycles of Loading:
 - Static loading specified

 - Use of p-y modification factors for p-y curves not selected
 - Analysis uses layering correction (Method of Georgiadis)
 - No distributed lateral loads are entered
 - Loading by lateral soil movements acting on pile not selected
 - Input of shear resistance at the pile tip not selected
 - Input of moment resistance at the pile tip not selected
 - Computation of pile-head foundation stiffness matrix not selected
 - Push-over analysis of pile not selected
 - Buckling analysis of pile not selected

Output Options:
 - Output files use decimal points to denote decimal symbols.
 - Values of pile-head deflection, bending moment, shear force, and
   soil reaction are printed for full length of pile.
 - Printing Increment (nodal spacing of output points) = 1
 - No p-y curves to be computed and reported for user-specified depths
 - Print using wide report formats
```

Pile Structural Properties and Geometry

Number of pile sections defined = 1
Total length of pile = 50.500 ft
Depth of ground surface below top of pile = 2.5000 ft

Pile diameters used for p-y curve computations are defined using 2 points.

p-y curves are computed using pile diameter values interpolated with depth over the length of the pile. A summary of values of pile diameter vs. depth follows.

Point No.	Depth Below Pile Head feet	Pile Diameter inches
1	0.000	66.0000
2	50.500	66.0000

Input Structural Properties for Pile Sections:

Pile Section No. 1:

Section 1 is a round drilled shaft, bored pile, or CIDH pile
Length of section = 50.500000 ft
Shaft Diameter = 66.000000 in
Shear capacity of section = 0.0000 lbs

Ground Slope and Pile Batter Angles

Ground Slope Angle = 0.000 degrees
= 0.000 radians

Pile Batter Angle = 0.000 degrees
= 0.000 radians

Soil and Rock Layering Information

The soil profile is modelled using 3 layers

Layer 1 is sand, p-y criteria by Reese et al., 1974

Distance from top of pile to top of layer = 2.500000 ft
Distance from top of pile to bottom of layer = 25.500000 ft
Effective unit weight at top of layer = 130.000000 pcf
Effective unit weight at bottom of layer = 130.000000 pcf
Friction angle at top of layer = 31.000000 deg.
Friction angle at bottom of layer = 31.000000 deg.
Subgrade k at top of layer = 90.000000 pci
Subgrade k at bottom of layer = 90.000000 pci

Layer 2 is sand, p-y criteria by Reese et al., 1974

Distance from top of pile to top of layer = 25.500000 ft
Distance from top of pile to bottom of layer = 45.500000 ft
Effective unit weight at top of layer = 130.000000 pcf
Effective unit weight at bottom of layer = 130.000000 pcf
Friction angle at top of layer = 40.000000 deg.
Friction angle at bottom of layer = 40.000000 deg.
Subgrade k at top of layer = 40.000000 pci
Subgrade k at bottom of layer = 40.000000 pci

Layer 3 is sand, p-y criteria by Reese et al., 1974

Distance from top of pile to top of layer = 45.500000 ft
Distance from top of pile to bottom of layer = 85.500000 ft
Effective unit weight at top of layer = 130.000000 pcf
Effective unit weight at bottom of layer = 130.000000 pcf
Friction angle at top of layer = 43.000000 deg.
Friction angle at bottom of layer = 43.000000 deg.
Subgrade k at top of layer = 225.000000 pci
Subgrade k at bottom of layer = 225.000000 pci

(Depth of the lowest soil layer extends 35.000 ft below the pile tip)

Summary of Input Soil Properties

Layer Num.	Soil Type Name (p-y Curve Type)	Layer Depth ft	Effective Unit Wt. pcf	Angle of Friction deg.	kpy pci
1	Sand (Reese, et al.)	2.5000 25.5000	130.0000 130.0000	31.0000 31.0000	90.0000 90.0000
2	Sand (Reese, et al.)	25.5000 45.5000	130.0000 130.0000	40.0000 40.0000	40.0000 40.0000
3	Sand (Reese, et al.)	45.5000 85.5000	130.0000 130.0000	43.0000 43.0000	225.0000 225.0000

Static Loading Type

Static loading criteria were used when computing p-y curves for all analyses.

Pile-head Loading and Pile-head Fixity Conditions

Number of loads specified = 3

Load No.	Load Type	Condition 1		Condition 2		Axial Thrust Force, lbs	Compute Top y vs. Pile Length
1	1	V = 12849. lbs	M =	12771456. in-lbs		26701.	No
2	1	V = 5782. lbs	M =	5747155. in-lbs		16688.	No
3	1	V = 6210. lbs	M =	6231168. in-lbs		28916.	No

V = shear force applied normal to pile axis
M = bending moment applied to pile head
y = lateral deflection normal to pile axis
S = pile slope relative to original pile batter angle
R = rotational stiffness applied to pile head
Values of top y vs. pile lengths can be computed only for load types with specified shear loading (Load Types 1, 2, and 3).
Thrust force is assumed to be acting axially for all pile batter angles.

Computations of Nominal Moment Capacity and Nonlinear Bending Stiffness

Axial thrust force values were determined from pile-head loading conditions

Number of Pile Sections Analyzed = 1

Pile Section No. 1:

Dimensions and Properties of Drilled Shaft (Bored Pile):

Length of Section	=	50.500000 ft
Shaft Diameter	=	66.000000 in
Concrete Cover Thickness (to edge of long. rebar)	=	4.500000 in
Number of Reinforcing Bars	=	24 bars
Yield Stress of Reinforcing Bars	=	60000. psi
Modulus of Elasticity of Reinforcing Bars	=	29000000. psi
Gross Area of Shaft	=	3421. sq. in.
Total Area of Reinforcing Steel	=	18.960000 sq. in.
Area Ratio of Steel Reinforcement	=	0.55 percent
Edge-to-Edge Bar Spacing	=	6.309467 in
Maximum Concrete Aggregate Size	=	0.750000 in
Ratio of Bar Spacing to Aggregate Size	=	8.41
Offset of Center of Rebar Cage from Center of Pile	=	0.0000 in

Axial Structural Capacities:

Nom. Axial Structural Capacity = 0.85 Fc Ac + Fy As	=	12705.197 kips
Tensile Load for Cracking of Concrete	=	-1478.457 kips
Nominal Axial Tensile Capacity	=	-1137.600 kips

Reinforcing Bar Dimensions and Positions Used in Computations:

Bar Number	Bar Diam. inches	Bar Area sq. in.	X inches	Y inches
1	1.000000	0.790000	28.000000	0.00000
2	1.000000	0.790000	27.045923	7.246933
3	1.000000	0.790000	24.248711	14.000000
4	1.000000	0.790000	19.798990	19.798990
5	1.000000	0.790000	14.000000	24.248711
6	1.000000	0.790000	7.246933	27.045923
7	1.000000	0.790000	0.00000	28.000000
8	1.000000	0.790000	-7.246933	27.045923
9	1.000000	0.790000	-14.000000	24.248711
10	1.000000	0.790000	-19.798990	19.798990
11	1.000000	0.790000	-24.248711	14.000000
12	1.000000	0.790000	-27.045923	7.246933
13	1.000000	0.790000	-28.000000	0.00000
14	1.000000	0.790000	-27.045923	-7.246933
15	1.000000	0.790000	-24.248711	-14.000000
16	1.000000	0.790000	-19.798990	-19.798990
17	1.000000	0.790000	-14.000000	-24.248711
18	1.000000	0.790000	-7.246933	-27.045923
19	1.000000	0.790000	0.00000	-28.000000
20	1.000000	0.790000	7.246933	-27.045923
21	1.000000	0.790000	14.000000	-24.248711
22	1.000000	0.790000	19.798990	-19.798990
23	1.000000	0.790000	24.248711	-14.000000
24	1.000000	0.790000	27.045923	-7.246933

NOTE: The positions of the above rebars were computed by LPile

Minimum spacing between any two bars not equal to zero = 6.309 inches between bars 15 and 16.

Ratio of bar spacing to maximum aggregate size = 8.41

Concrete Properties:

```
Compressive Strength of Concrete                        =        4000. psi
Modulus of Elasticity of Concrete                       =     3604997. psi
Modulus of Rupture of Concrete                          =  -474.341649 psi
Compression Strain at Peak Stress                       =     0.001886
Tensile Strain at Fracture of Concrete                  =   -0.0001154
Maximum Coarse Aggregate Size                           =     0.750000 in


Number of Axial Thrust Force Values Determined from Pile-head Loadings = 3

   Number     Axial Thrust Force
                    kips
   ------     ------------------
      1               16.688
      2               26.701
      3               28.916


Definitions of Run Messages and Notes:
--------------------------------------

  C = concrete in section has cracked in tension.
  Y = stress in reinforcing steel has reached yield stress.
  T = ACI 318 criteria for tension-controlled section met, tensile strain in
      reinforcement exceeds 0.005 while simultaneously compressive strain in
      concrete more than 0.003. See ACI 318, Section 10.3.4.
  Z = depth of tensile zone in concrete section is less than 10 percent of
      section depth.

Bending Stiffness (EI) = Computed Bending Moment / Curvature.
Position of neutral axis is measured from edge of compression side of pile.
Compressive stresses and strains are positive in sign.
Tensile stresses and strains are negative in sign.


Axial Thrust Force =     16.688 kips

    Bending       Bending       Bending      Depth to      Max Comp      Max Tens      Max
Conc      Max Steel  Run
   Curvature      Moment       Stiffness      N Axis        Strain        Strain
Stress        Stress    Msg
    rad/in.       in-kip        kip-in2         in           in/in         in/in          ksi
         ksi
------------- ------------- ------------- ------------- ------------- -------------
------------- ------------- ---
  4.16667E-07         1719.   4125032485.    35.6818172    0.00001487   -0.00001263
0.0622282     0.3793178
  8.33333E-07         3430.   4115416357.    34.3449369    0.00002862   -0.00002638
0.1193160     0.7263276
   0.00000125         5132.   4105746779.    33.8993292    0.00004237   -0.00004013
0.1759871     1.0733382
   0.00000167         6827.   4096063804.    33.6765381    0.00005613   -0.00005387
0.2322415     1.4203493
   0.00000208         8513.   4086375466.    33.5428734    0.00006988   -0.00006762
0.2880790     1.7673611
   0.00000250        10192.   4076684446.    33.4537721    0.00008363   -0.00008137
0.3434998     2.1143735
   0.00000292        11862.   4066991894.    33.3901355    0.00009739   -0.00009511
0.3985039     2.4613865
   0.00000333        13524.   4057298384.    33.3424145     0.0001111    -0.0001089
0.4530912     2.8084001
   0.00000375        13524.   3606487452.    14.8037683    0.00005551    -0.0001920
0.2268846    -5.1010527 C
   0.00000417        13524.   3245838707.    14.6530710    0.00006105    -0.0002139
0.2491068    -5.6860456 C
   0.00000458        13524.   2950762461.    14.5303800    0.00006660    -0.0002359
0.2712747    -6.2709578 C
   0.00000500        13524.   2704865589.    14.4286950    0.00007214    -0.0002579
0.2933884    -6.8557892 C
   0.00000542        13524.   2496799005.    14.3431698    0.00007769    -0.0002798
0.3154476    -7.4405396 C
   0.00000583        13524.   2318456219.    14.2703428    0.00008324    -0.0003018
0.3374523    -8.0252087 C
   0.00000625        13524.   2163892471.    14.2076757    0.00008880    -0.0003237
0.3594025    -8.6097963 C
   0.00000667        13524.   2028649192.    14.1511954    0.00009434    -0.0003457
0.3812425    -9.1947022 C
   0.00000708        13524.   1909316886.    14.1008978    0.00009988    -0.0003676
0.4030036    -9.7797031 C
   0.00000750        13524.   1803243726.    14.0565822     0.0001054    -0.0003896
0.4247109   -10.3646183 C
   0.00000792        13524.   1708336162.    14.0173052     0.0001110    -0.0004115
0.4463643   -10.9494478 C
   0.00000833        13524.   1622919353.    13.9823119     0.0001165    -0.0004335
0.4679638   -11.5341913 C
   0.00000875        13524.   1545637480.    13.9509913     0.0001221    -0.0004554
0.4895092   -12.1188484 C
   0.00000917        13524.   1475381230.    13.9228435     0.0001276    -0.0004774
0.5110006   -12.7034191 C
   0.00000958        13524.   1411234220.    13.8974555     0.0001332    -0.0004993
0.5324378   -13.2879030 C
   0.00001000        13524.   1352432795.    13.8744832     0.0001387    -0.0005213
0.5538207   -13.8722998 C
   0.00001042        13524.   1298335483.    13.8536376     0.0001443    -0.0005432
0.5751493   -14.4566098 C
   0.00001083        13524.   1248399503.    13.8346739     0.0001499    -0.0005651
0.5964235   -15.0408319 C
   0.00001125        13524.   1202162484.    13.8173838     0.0001554    -0.0005871
0.6176432   -15.6249662 C
   0.00001167        13524.   1159228110.    13.8015888     0.0001610    -0.0006090
0.6388084   -16.2090126 C
   0.00001208        13524.   1119254727.    13.7871350     0.0001666    -0.0006309
0.6599189   -16.7929708 C
   0.00001250        13524.   1081946236.    13.7738888     0.0001722    -0.0006528
0.6809747   -17.3768405 C
   0.00001292        13524.   1047044744.    13.7617340     0.0001778    -0.0006747
0.7019757   -17.9606214 C
   0.00001333        13524.   1014324596.    13.7505691     0.0001833    -0.0006967
0.7229219   -18.5443134 C
   0.00001375        13524.    983587487.    13.7403047     0.0001889    -0.0007186
0.7438131   -19.1279161 C
   0.00001417        13524.    954658443.    13.7308619     0.0001945    -0.0007405
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0.7646492   -19.7114293 C
   0.00001458        13524.    927382488.    13.7221709     0.0002001    -0.0007624
0.7854303   -20.2948528 C
   0.00001500        13524.    901621863.    13.7141697     0.0002057    -0.0007843
0.8061561   -20.8781862 C
   0.00001542        13524.    877253705.    13.7068029     0.0002113    -0.0008062
0.8268267   -21.4614294 C
   0.00001583        13524.    854168081.    13.7000209     0.0002169    -0.0008281
0.8474420   -22.0445821 C
   0.00001625        13524.    832266335.    13.6937794     0.0002225    -0.0008500
0.8680017   -22.6276440 C
   0.00001708        13524.    791667977.    13.6827618     0.0002337    -0.0008938
0.9089547   -23.7934944 C
   0.00001792        13524.    754846211.    13.6734741     0.0002450    -0.0009375
0.9496849   -24.9589784 C
   0.00001875        13524.    721297490.    13.6656897     0.0002562    -0.0009813
0.9901918   -26.1240938 C
   0.00001958        13524.    690603980.    13.6592205     0.0002675    -0.0010250
1.0304746   -27.2888386 C
   0.00002042        13524.    662416063.    13.6539091     0.0002788    -0.0010687
1.0705327   -28.4532105 C
   0.00002125        13524.    636438962.    13.6496230     0.0002901    -0.0011124
1.1103654   -29.6172073 C
   0.00002208        13524.    612422398.    13.6462495     0.0003014    -0.0011561
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   0.00002292        13524.    590152492.    13.6436925     0.0003127    -0.0011998
1.1893518   -31.9440668 C
   0.00002375        13524.    569445387.    13.6418694     0.0003240    -0.0012435
1.2285042   -33.1069249 C
   0.00002458        13524.    550142154.    13.6407088     0.0003353    -0.0012872
1.2674283   -34.2693988 C
   0.00002542        13524.    532104706.    13.6401487     0.0003467    -0.0013308
1.3061236   -35.4314862 C
   0.00002625        13709.    522247437.    13.6401350     0.0003581    -0.0013744
1.3445893   -36.5931847 C
   0.00002708        14129.    521677795.    13.6406204     0.0003694    -0.0014181
1.3828247   -37.7544918 C
   0.00002792        14548.    521130674.    13.6415631     0.0003808    -0.0014617
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   0.00002875        14967.    520604056.    13.6429263     0.0003922    -0.0015053
1.4586016   -40.0759226 C
   0.00002958        15386.    520096151.    13.6446773     0.0004037    -0.0015488
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   0.00003042        15805.    519605361.    13.6467872     0.0004151    -0.0015924
1.5334485   -42.3957589 C
   0.00003125        16223.    519130263.    13.6492300     0.0004265    -0.0016360
1.5705213   -43.5550728 C
   0.00003208        16641.    518669576.    13.6519825     0.0004380    -0.0016795
1.6073593   -44.7139804 C
   0.00003292        17058.    518222152.    13.6550239     0.0004495    -0.0017230
1.6439618   -45.8724792 C
   0.00003375        17475.    517786955.    13.6583355     0.0004610    -0.0017665
1.6803280   -47.0305666 C
   0.00003458        17892.    517363046.    13.6619004     0.0004725    -0.0018100
1.7164571   -48.1882399 C
   0.00003542        18309.    516949578.    13.6657033     0.0004840    -0.0018535
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   0.00003625        18725.    516545776.    13.6697304     0.0004955    -0.0018970
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   0.00003708        19141.    516150939.    13.6739692     0.0005071    -0.0019404
1.8234139   -51.6587482 C
   0.00003792        19556.    515764425.    13.6784082     0.0005186    -0.0019839
1.8585866   -52.8147379 C
   0.00003875        19971.    515385646.    13.6830369     0.0005302    -0.0020273
1.8935183   -53.9702999 C
   0.00003958        20386.    515014063.    13.6878460     0.0005418    -0.0020707
1.9282080   -55.1254311 C
   0.00004042        20800.    514649184.    13.6928266     0.0005534    -0.0021141
1.9626550   -56.2801288 C
   0.00004125        21214.    514290552.    13.6979709     0.0005650    -0.0021575
1.9968584   -57.4343900 C
   0.00004208        21628.    513937748.    13.7032715     0.0005767    -0.0022008
2.0308173   -58.5882118 C
   0.00004292        22042.    513590385.    13.7087218     0.0005883    -0.0022442
2.0645309   -59.7415911 C
   0.00004375        22451.    513156128.    13.7135273     0.0006000    -0.0022875
2.0978975   -60.0000000 CY
   0.00004458        22813.    511687650.    13.7094288     0.0006112    -0.0023313
2.1298462   -60.0000000 CY
   0.00004542        23118.    509014651.    13.6946995     0.0006220    -0.0023755
2.1601161   -60.0000000 CY
   0.00004625        23403.    506019015.    13.6770606     0.0006326    -0.0024199
2.1896851   -60.0000000 CY
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   0.00004958        24344.    490963330.    13.5764284     0.0006732    -0.0025993
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2.4979504   -60.0000000 CY
   0.00005958        26272.    440923708.    13.1849890     0.0007856    -0.0031469
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2.6738854   -60.0000000 CY
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2.9727253   -60.0000000 CY
   0.00007958        28273.    355266360.    12.4014741     0.0009870    -0.0042655
3.0368757   -60.0000000 CY
   0.00008292        28478.    343455164.    12.2830774     0.0010185    -0.0044540
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3.1590038   -60.0000000 CY
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3.2711523   -60.0000000 CY
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3.3244662   -60.0000000 CY
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    0.0001063        29638.    278948397.    11.5846711     0.0012309    -0.0057816
3.4640411   -60.0000000 CY
    0.0001096        29742.    271413549.    11.4932589     0.0012595    -0.0059730
3.5058810   -60.0000000 CY
    0.0001129        29844.    264304204.    11.4047456     0.0012878    -0.0061647
3.5456179   -60.0000000 CY
    0.0001163        29946.    257597349.    11.3220174     0.0013162    -0.0063563
3.5838020   -60.0000000 CY
    0.0001196        30046.    251259278.    11.2445983     0.0013447    -0.0065478
3.6204194   -60.0000000 CY
    0.0001229        30147.    245259917.    11.1720643     0.0013732    -0.0067393
3.6554559   -60.0000000 CY
    0.0001263        30246.    239572366.    11.1040365     0.0014019    -0.0069306
3.6888972   -60.0000000 CY
    0.0001296        30345.    234172490.    11.0401749     0.0014306    -0.0071219
3.7207285   -60.0000000 CY
    0.0001329        30443.    229038577.    10.9801742     0.0014594    -0.0073131
3.7509348   -60.0000000 CY
    0.0001363        30541.    224151034.    10.9237589     0.0014884    -0.0075041
3.7795009   -60.0000000 CY
    0.0001396        30614.    219324125.    10.8610507     0.0015160    -0.0076965
3.8051550   -60.0000000 CY
    0.0001429        30675.    214638137.    10.7949259     0.0015428    -0.0078897
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    0.0001462        30721.    210061524.    10.7274636     0.0015689    -0.0080836
3.8496984   -60.0000000 CY
    0.0001496        30767.    205686102.    10.6635175     0.0015951    -0.0082774
3.8696201   -60.0000000 CY
    0.0001529        30813.    201498674.    10.6028632     0.0016214    -0.0084711
3.8881806   -60.0000000 CY
    0.0001562        30857.    197487167.    10.5452954     0.0016477    -0.0086648
3.9053676   -60.0000000 CY
    0.0001596        30902.    193640518.    10.4906261     0.0016741    -0.0088584
3.9211681   -60.0000000 CY
    0.0001629        30946.    189948568.    10.4386828     0.0017006    -0.0090519
3.9355693   -60.0000000 CY
    0.0001662        30989.    186401970.    10.3893072     0.0017272    -0.0092453
3.9485579   -60.0000000 CY
    0.0001696        31032.    182992115.    10.3423534     0.0017539    -0.0094386
3.9601206   -60.0000000 CY
    0.0001729        31075.    179711052.    10.2976870     0.0017806    -0.0096319
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3.9860218   -60.0000000 CY
    0.0001829        31197.    170552495.    10.1689451     0.0018601    -0.0102124
3.9915759   -60.0000000 CY
    0.0002029        31421.    154844937.     9.9462062     0.0020183    -0.0113742
3.9946619   -60.0000000 CY
    0.0002229        31611.    141808168.     9.7722217     0.0021784    -0.0125341
3.9935590   -60.0000000 CY
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3.9854818   -60.0000000 CY
    0.0002629        31773.    120846802.     9.4513875     0.0024849    -0.0148676
3.9999153   -60.0000000 CY
    0.0002829        31826.    112491953.     9.3210165     0.0026371    -0.0160354
3.9910022   -60.0000000 CY
    0.0003029        31875.    105225432.     9.2139453     0.0027911    -0.0172014
3.9983934   -60.0000000 CY
    0.0003229        31917.     98840451.     9.1273708     0.0029474    -0.0183651
3.9861289   -60.0000000 CY
    0.0003429        31957.     93191453.     9.0551020     0.0031051    -0.0195274
3.9992451   -60.0000000 CYT
    0.0003629        31992.     88152577.     8.9963473     0.0032649    -0.0206876
3.9807916   -60.0000000 CYT
    0.0003829        32024.     83632759.     8.9474130     0.0034261    -0.0218464
3.9881033   -60.0000000 CYT
    0.0004029        32054.     79555865.     8.9053816     0.0035881    -0.0230044
3.9992011   -60.0000000 CYT
    0.0004229        32080.     75853530.     8.8635553     0.0037485    -0.0241640
3.9849628   -60.0000000 CYT
    0.0004429        32101.     72477473.     8.8269306     0.0039096    -0.0253229
3.9678478   -60.0000000 CYT


Axial Thrust Force =     26.701 kips

    Bending       Bending       Bending      Depth to      Max Comp      Max Tens      Max
Conc      Max Steel  Run
   Curvature      Moment       Stiffness      N Axis        Strain        Strain
Stress        Stress    Msg
    rad/in.       in-kip        kip-in2         in           in/in         in/in          ksi
        ksi
------------- ------------- ------------- ------------- ------------- -------------
------------- ------------- ---
  4.16667E-07         1719.   4124782891.    37.2909811    0.00001554   -0.00001196
0.0650492     0.3987619
  8.33333E-07         3429.   4115290261.    35.1519071    0.00002929   -0.00002571
0.1221248     0.7458294
   0.00000125         5132.   4105662141.    34.4389202    0.00004305   -0.00003945
0.1787836     1.0928984
   0.00000167         6827.   4095999922.    34.0824484    0.00005680   -0.00005320
0.2350256     1.4399683
   0.00000208         8513.   4086324047.    33.8685821    0.00007056   -0.00006694
0.2908508     1.7870393
   0.00000250        10192.   4076641334.    33.7260179    0.00008432   -0.00008068
0.3462592     2.1341113
   0.00000292        11862.   4066954714.    33.6241979    0.00009807   -0.00009443
0.4012507     2.4811842
   0.00000333        13524.   4057265651.    33.5478431     0.0001118    -0.0001082
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0.4558254     2.8282582
   0.00000375        13524.   3606458356.    15.6823973    0.00005881    -0.0001887
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   0.00000417        13524.   3245812521.    15.4604923    0.00006442    -0.0002106
0.2629110    -5.5884822 C
   0.00000458        13524.   2950738655.    15.2721953    0.00007000    -0.0002325
0.2851841    -6.1723582 C
   0.00000500        13524.   2704843767.    15.1158245    0.00007558    -0.0002544
0.3074017    -6.7561554 C
   0.00000542        13524.   2496778862.    14.9840138    0.00008116    -0.0002763
0.3295637    -7.3398737 C
   0.00000583        13524.   2318437515.    14.8715012    0.00008675    -0.0002982
0.3516701    -7.9235127 C
   0.00000625        13524.   2163875014.    14.7703297    0.00009231    -0.0003202
0.3736173    -8.5078152 C
   0.00000667        13524.   2028632825.    14.6812093    0.00009787    -0.0003421
0.3954823    -9.0922329 C
   0.00000708        13524.   1909301483.    14.6029736     0.0001034    -0.0003641
0.4172926    -9.6765683 C
   0.00000750        13524.   1803229178.    14.5338096     0.0001090    -0.0003860
0.4390480   -10.2608214 C
   0.00000792        13524.   1708322379.    14.4722859     0.0001146    -0.0004079
0.4607486   -10.8449918 C
   0.00000833        13524.   1622906260.    14.4172572     0.0001201    -0.0004299
0.4823941   -11.4290795 C
   0.00000875        13524.   1545625010.    14.3677965     0.0001257    -0.0004518
0.5039847   -12.0130841 C
   0.00000917        13524.   1475369328.    14.3231455     0.0001313    -0.0004737
0.5255201   -12.5970055 C
   0.00000958        13524.   1411222835.    14.2826775     0.0001369    -0.0004956
0.5470004   -13.1808433 C
   0.00001000        13524.   1352421884.    14.2458705     0.0001425    -0.0005175
0.5684254   -13.7645975 C
   0.00001042        13524.   1298325008.    14.2122858     0.0001480    -0.0005395
0.5897950   -14.3482678 C
   0.00001083        13524.   1248389431.    14.1810715     0.0001536    -0.0005614
0.6110889   -14.9320050 C
   0.00001125        13524.   1202152785.    14.1512656     0.0001592    -0.0005833
0.6322765   -15.5160371 C
   0.00001167        13524.   1159218757.    14.1238498     0.0001648    -0.0006052
0.6534095   -16.0999808 C
   0.00001208        13524.   1119245697.    14.0985774     0.0001704    -0.0006271
0.6744878   -16.6838360 C
   0.00001250        13524.   1081937507.    14.0752350     0.0001759    -0.0006491
0.6955113   -17.2676023 C
   0.00001292        13524.   1047036297.    14.0536363     0.0001815    -0.0006710
0.7164799   -17.8512795 C
   0.00001333        13524.   1014316413.    14.0336185     0.0001871    -0.0006929
0.7373936   -18.4348675 C
   0.00001375        13524.    983579552.    14.0150386     0.0001927    -0.0007148
0.7582523   -19.0183658 C
   0.00001417        13524.    954650741.    13.9977704     0.0001983    -0.0007367
0.7790558   -19.6017747 C
   0.00001458        13524.    927375006.    13.9817019     0.0002039    -0.0007586
0.7998042   -20.1850930 C
   0.00001500        13524.    901614589.    13.9667339     0.0002095    -0.0007805
0.8204974   -20.7683210 C
   0.00001542        13524.    877246627.    13.9527777     0.0002151    -0.0008024
0.8411352   -21.3514584 C
   0.00001583        13524.    854161190.    13.9397539     0.0002207    -0.0008243
0.8617176   -21.9345049 C
   0.00001625        13524.    832259621.    13.9275914     0.0002263    -0.0008462
0.8822444   -22.5174602 C
   0.00001708        13524.    791661590.    13.9056005     0.0002376    -0.0008899
0.9231313   -23.6830962 C
   0.00001792        13524.    754840121.    13.8863631     0.0002488    -0.0009337
0.9637952   -24.8483646 C
   0.00001875        13524.    721291671.    13.8695161     0.0002601    -0.0009774
1.0042354   -26.0132631 C
   0.00001958        13524.    690598409.    13.8547582     0.0002713    -0.0010212
1.0444512   -27.1777899 C
   0.00002042        13524.    662410718.    13.8418373     0.0002826    -0.0010649
1.0844421   -28.3419417 C
   0.00002125        13524.    636433828.    13.8305409     0.0002939    -0.0011086
1.1242073   -29.5057170 C
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Axial Thrust Force = 28.916 kips

Bending Conc Curvature rad/in.	Bending Max Steel Moment in-kip	Bending Stress Stiffness kip-in2	Depth to N Axis in	Max Comp Strain in/in	Max Tens Strain in/in	Max Stress ksi	Run Msg
4.16667E-07	1719.	4124712412.	37.6469593	0.00001569	-0.00001181	0.0656731	0.4030633
8.33333E-07	3429.	4115254564.	35.3304217	0.00002944	-0.00002556	0.1227460	0.7501435
0.00000125	5132.	4105638170.	34.5582857	0.00004320	-0.00003930	0.1794021	1.0972254
0.00000167	6827.	4095981828.	34.1722416	0.00005695	-0.00005305	0.2356414	1.4443083
0.00000208	8513.	4086309480.	33.9406333	0.00007071	-0.00006679	0.2914638	1.7913924
0.00000250	10192.	4076629121.	33.7862424	0.00008447	-0.00008053	0.3468695	2.1384776
0.00000292	11862.	4066944181.	33.6759757	0.00009822	-0.00009428	0.4018582	2.4855638
0.00000333	13524.	4057256378.	33.5932867	0.0001120	-0.0001080	0.4564301	2.8326510
0.00000375	13524.	3606450114.	15.8687102	0.00005951	-0.0001880	0.2433166	-4.9852403 C
0.00000417	13524.	3245805102.	15.6307502	0.00006513	-0.0002099	0.2658186	-5.5679093 C
0.00000458	13524.	2950731911.	15.4328163	0.00007073	-0.0002318	0.2881924	-6.1510090 C
0.00000500	13524.	2704837585.	15.2631801	0.00007632	-0.0002537	0.3104034	-6.7347889 C
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0.00000792	13524.	1708318475.	14.5709836	0.0001154	-0.0004071	0.4638650	-10.8223325 C
0.00000833	13524.	1622902551.	14.5111021	0.0001209	-0.0004291	0.4855038	-11.4064003 C
0.00000875	13524.	1545621477.	14.4572511	0.0001265	-0.0004510	0.5070875	-11.9903850 C
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3.3868158   -60.0000000 CY
    0.0001029        29828.    289826633.    11.7533872     0.0012096    -0.0055829
3.4322994   -60.0000000 CY
    0.0001063        29935.    281740483.    11.6585574     0.0012387    -0.0057738
3.4761593   -60.0000000 CY
    0.0001096        30041.    274140149.    11.5702698     0.0012679    -0.0059646
3.5183807   -60.0000000 CY
    0.0001129        30144.    266956053.    11.4817311     0.0012965    -0.0061560
3.5579590   -60.0000000 CY
    0.0001163        30245.    260170532.    11.3970811     0.0013249    -0.0063476
3.5956543   -60.0000000 CY
    0.0001196        30345.    253758152.    11.3178534     0.0013534    -0.0065391
3.6317781   -60.0000000 CY
    0.0001229        30445.    247688483.    11.2436147     0.0013820    -0.0067305
3.6663161   -60.0000000 CY
    0.0001263        30544.    241934306.    11.1739781     0.0014107    -0.0069218
3.6992538   -60.0000000 CY
    0.0001296        30643.    236471202.    11.1085965     0.0014395    -0.0071130
3.7305761   -60.0000000 CY
    0.0001329        30741.    231277202.    11.0471578     0.0014684    -0.0073041
3.7602681   -60.0000000 CY
    0.0001363        30838.    226332483.    10.9893809     0.0014973    -0.0074952
3.7883142   -60.0000000 CY
    0.0001396        30916.    221488048.    10.9294480     0.0015256    -0.0076869
3.8139892   -60.0000000 CY
    0.0001429        30983.    216791762.    10.8677557     0.0015532    -0.0078793
3.8374488   -60.0000000 CY
    0.0001462        31029.    212164157.    10.7988849     0.0015793    -0.0080732
3.8581631   -60.0000000 CY
    0.0001496        31074.    207739991.    10.7335986     0.0016056    -0.0082669
3.8775234   -60.0000000 CY
    0.0001529        31119.    203505923.    10.6716678     0.0016319    -0.0084606
3.8955170   -60.0000000 CY
    0.0001562        31164.    199449746.    10.6128834     0.0016583    -0.0086542
3.9121313   -60.0000000 CY
    0.0001596        31208.    195560272.    10.5570537     0.0016847    -0.0088478
3.9273534   -60.0000000 CY
    0.0001629        31252.    191827229.    10.5040030     0.0017113    -0.0090412
3.9411702   -60.0000000 CY
    0.0001662        31295.    188241165.    10.4535698     0.0017379    -0.0092346
3.9535681   -60.0000000 CY
    0.0001696        31338.    184793374.    10.4056056     0.0017646    -0.0094279
3.9645337   -60.0000000 CY
    0.0001729        31380.    181475817.    10.3599733     0.0017914    -0.0096211
3.9740529   -60.0000000 CY
    0.0001762        31422.    178281066.    10.3165466     0.0018183    -0.0098142
3.9821116   -60.0000000 CY
    0.0001796        31463.    175202239.    10.2752085     0.0018453    -0.0100072
3.9886954   -60.0000000 CY
    0.0001829        31504.    172232960.    10.2358509     0.0018723    -0.0102002
3.9937895   -60.0000000 CY
    0.0002029        31726.    156351288.    10.0091612     0.0020310    -0.0113615
3.9964577   -60.0000000 CY
    0.0002229        31917.    143180193.     9.8323699     0.0021918    -0.0125207
3.9956388   -60.0000000 CY
    0.0002429        32018.    131807080.     9.6660745     0.0023481    -0.0136844
3.9889017   -60.0000000 CY
    0.0002629        32084.    122030058.     9.5173041     0.0025023    -0.0148502
3.9972882   -60.0000000 CY
    0.0002829        32136.    113587052.     9.3838601     0.0026549    -0.0160176
3.9942232   -60.0000000 CY
    0.0003029        32183.    106243076.     9.2745188     0.0028094    -0.0171831
3.9926407   -60.0000000 CY
    0.0003229        32225.     99792386.     9.1853704     0.0029661    -0.0183464
3.9904122   -60.0000000 CY
    0.0003429        32263.     94085177.     9.1109390     0.0031243    -0.0195082
3.9999485   -60.0000000 CYT
    0.0003629        32297.     88993576.     9.0506693     0.0032846    -0.0206679
3.9746107   -60.0000000 CYT
    0.0003829        32329.     84427945.     8.9999146     0.0034462    -0.0218263
3.9922988   -60.0000000 CYT
    0.0004029        32358.     80310102.     8.9572650     0.0036090    -0.0229835
3.9999628   -60.0000000 CYT
    0.0004229        32384.     76572786.     8.9232468     0.0037738    -0.0241387
3.9770480   -60.0000000 CYT
    0.0004429        32384.     73115125.     8.9741310     0.0039748    -0.0252577
3.9878600    60.0000000 CYT


-------------------------------------------------------------------------------
   Summary of Results for Nominal (Unfactored) Moment Capacity for Section 1
-------------------------------------------------------------------------------

Moment values interpolated at maximum compressive strain = 0.003
or maximum developed moment if pile fails at smaller strains.

 Load           Axial Thrust        Nominal Mom. Cap.      Max. Comp.
  No.              kips                 in-kip               Strain
 ----         ----------------     ------------------     ------------
   1               16.688              31930.461           0.00300000
   2               26.701              32178.143           0.00300000
   3               28.916              32232.927           0.00300000

Note that the values of moment capacity in the table above are not
factored by a strength reduction factor (phi-factor).

In ACI 318, the value of the strength reduction factor depends on whether
the transverse reinforcing steel bars are tied hoops (0.65) or spirals (0.70).

The above values should be multiplied by the appropriate strength reduction
factor to compute ultimate moment capacity according to ACI 318, Section
9.3.2.2 or the value required by the design standard being followed.

The following table presents factored moment capacities and corresponding
bending stiffnesses computed for common resistance factor values used for
reinforced concrete sections.

Axial     Resist.       Nominal     Ult. (Fac)    Ult. (Fac)   Bend. Stiff.
Load      Factor      Moment Cap    Ax. Thrust    Moment Cap    at Ult Mom
 No.    for Moment      in-kips        kips         in-kips      kip-in^2
-----  ------------  ------------  ------------  ------------  ------------
   1       0.65            31930.     10.847200        20755.    514689336.
```

2	0.65	32178.	17.355650	20916.	519455603.
3	0.65	32233.	18.795400	20951.	520511610.
1	0.75	31930.	11.681600	23948.	498965830.
2	0.75	32178.	18.690700	24134.	503872157.
3	0.75	32233.	20.241200	24175.	504929252.
1	0.90	31930.	12.516000	28737.	329644256.
2	0.90	32178.	20.025750	28960.	333071644.
3	0.90	32233.	21.687000	29010.	333816303.

Layering Correction Equivalent Depths of Soil & Rock Layers

Layer No.	Top of Layer Below Pile Head ft	Equivalent Top Depth Below Grnd Surf ft	Same Layer Type As Layer Above	Layer is Rock or is Below Rock Layer	F0 Integral for Layer lbs	F1 Integral for Layer lbs
1	2.5000	0.00	N.A.	No	0.00	1855163.
2	25.5000	16.3916	Yes	No	1855163.	9264060.
3	45.5000	33.0786	Yes	No	1.11E+07	N.A.

Notes: The F0 integral of Layer n+1 equals the sum of the F0 and F1 integrals
for Layer n. Layering correction equivalent depths are computed only
for soil types with both shallow-depth and deep-depth expressions for
peak lateral load transfer. These soil types are soft and stiff clays,
non-liquefied sands, and cemented c-phi soil.

Computed Values of Pile Loading and Deflection
for Lateral Loading for Load Case Number 1

Pile-head conditions are Shear and Moment (Loading Type 1)

Shear force at pile head = 12849.0 lbs
Applied moment at pile head = 12771456.0 in-lbs
Axial thrust load on pile head = 26701.0 lbs

Depth X	Deflect. y	Bending Moment	Shear Force	Slope S	Total Stress	Bending Stiffness	Soil Res. p	Soil Spr. Distrib. Es*h	Lat. Load
feet	inches	in-lbs	lbs	radians	psi*	in-lb^2	lb/inch	lb/inch	lb/inch
0.00	0.2032	1.28E+07	12849.	-0.00170	0.00	4.06E+12	0.00	0.00	0.00
0.5050	0.1930	1.28E+07	12849.	-0.00168	0.00	4.06E+12	0.00	0.00	0.00
1.0100	0.1829	1.29E+07	12849.	-0.00166	0.00	4.06E+12	0.00	0.00	0.00
1.5150	0.1729	1.30E+07	12849.	-0.00164	0.00	4.06E+12	0.00	0.00	0.00
2.0200	0.1630	1.31E+07	12849.	-0.00162	0.00	4.06E+12	0.00	0.00	0.00
2.5250	0.1533	1.32E+07	12836.	-0.00160	0.00	4.06E+12	-4.1389	163.6200	0.00
3.0300	0.1437	1.32E+07	12575.	-0.00158	0.00	4.06E+12	-82.2297	3469.	0.00
3.5350	0.1341	1.33E+07	11871.	-0.00156	0.00	4.06E+12	-149.9463	6774.	0.00
4.0400	0.1248	1.34E+07	10788.	-0.00154	0.00	4.06E+12	-207.4860	10079.	0.00
4.5450	0.1155	1.34E+07	9387.	-0.00152	0.00	4.06E+12	-255.0471	13384.	0.00
5.0500	0.1063	1.35E+07	7727.	-0.00150	0.00	4.06E+12	-292.8296	16689.	0.00
5.5550	0.09730	1.35E+07	5867.	-0.00147	0.00	1.75E+12	-321.0340	19994.	0.00
6.0600	0.08856	1.36E+07	3862.	-0.00137	0.00	5.32E+11	-340.4826	23299.	0.00
6.5650	0.08075	1.36E+07	1756.	-0.00121	0.00	5.32E+11	-354.5071	26605.	0.00
7.0700	0.07388	1.36E+07	-422.5539	-0.00106	0.00	5.32E+11	-364.6480	29910.	0.00
7.5750	0.06795	1.36E+07	-2656.	-9.01E-04	0.00	5.32E+11	-372.4426	33215.	0.00
8.0800	0.06296	1.36E+07	-4934.	-7.46E-04	0.00	5.32E+11	-379.4228	36520.	0.00
8.5850	0.05890	1.35E+07	-7257.	-6.40E-04	0.00	1.40E+12	-387.1115	39825.	0.00
9.0900	0.05521	1.35E+07	-9620.	-6.00E-04	0.00	4.06E+12	-392.9086	43130.	0.00
9.5950	0.05163	1.34E+07	-12009.	-5.80E-04	0.00	4.06E+12	-395.6046	46435.	0.00
10.1000	0.04817	1.33E+07	-14406.	-5.60E-04	0.00	4.06E+12	-395.3942	49740.	0.00
10.6050	0.04484	1.32E+07	-16793.	-5.41E-04	0.00	4.06E+12	-392.4694	53046.	0.00
11.1100	0.04162	1.31E+07	-19155.	-5.21E-04	0.00	4.06E+12	-387.0194	56351.	0.00
11.6150	0.03852	1.30E+07	-21477.	-5.01E-04	0.00	4.06E+12	-379.2304	59656.	0.00
12.1200	0.03554	1.29E+07	-23745.	-4.82E-04	0.00	4.06E+12	-369.2847	62961.	0.00
12.6250	0.03268	1.27E+07	-25947.	-4.63E-04	0.00	4.06E+12	-357.3610	66266.	0.00
13.1300	0.02993	1.25E+07	-28071.	-4.44E-04	0.00	4.06E+12	-343.6337	69571.	0.00
13.6350	0.02730	1.24E+07	-30107.	-4.26E-04	0.00	4.06E+12	-328.2728	72876.	0.00
14.1400	0.02477	1.22E+07	-32045.	-4.07E-04	0.00	4.06E+12	-311.4434		

76181. 0.00
14.6450 0.02236 1.20E+07 -33877. -3.89E-04 0.00 4.07E+12 -293.3057
79487. 0.00
15.1500 0.02006 1.18E+07 -35596. -3.72E-04 0.00 4.07E+12 -274.0148
82792. 0.00
15.6550 0.01786 1.16E+07 -37195. -3.54E-04 0.00 4.07E+12 -253.7203
86097. 0.00
16.1600 0.01576 1.13E+07 -38669. -3.37E-04 0.00 4.07E+12 -232.5661
89402. 0.00
16.6650 0.01377 1.11E+07 -40012. -3.20E-04 0.00 4.07E+12 -210.6909
92707. 0.00
17.1700 0.01188 1.08E+07 -41220. -3.04E-04 0.00 4.07E+12 -188.2270
96012. 0.00
17.6750 0.01009 1.06E+07 -42292. -2.88E-04 0.00 4.07E+12 -165.3011
99317. 0.00
18.1800 0.00839 1.03E+07 -43223. -2.73E-04 0.00 4.08E+12 -142.0339
102622. 0.00
18.6850 0.00678 1.01E+07 -44012. -2.57E-04 0.00 4.08E+12 -118.5400
105928. 0.00
19.1900 0.00527 9792579. -44659. -2.43E-04 0.00 4.08E+12 -94.9280
109233. 0.00
19.6950 0.00384 9520239. -45163. -2.28E-04 0.00 4.08E+12 -71.3007
112538. 0.00
20.2000 0.00250 9245278. -45524. -2.14E-04 0.00 4.08E+12 -47.7549
115843. 0.00
20.7050 0.00124 8968562. -45742. -2.01E-04 0.00 4.08E+12 -24.3814
119148. 0.00
21.2100 6.26E-05 8690947. -45820. -1.88E-04 0.00 4.09E+12 -1.2655
122453. 0.00
21.7150 -0.00104 8413285. -45759. -1.75E-04 0.00 4.09E+12 21.5134
125758. 0.00
22.2200 -0.00206 8136410. -45560. -1.63E-04 0.00 4.09E+12 43.8813
129063. 0.00
22.7250 -0.00301 7861145. -45228. -1.51E-04 0.00 4.09E+12 65.7694
132369. 0.00
23.2300 -0.00389 7588293. -44765. -1.40E-04 0.00 4.09E+12 87.1140
135674. 0.00
23.7350 -0.00470 7318638. -44174. -1.29E-04 0.00 4.09E+12 107.8564
138979. 0.00
24.2400 -0.00545 7052943. -43460. -1.18E-04 0.00 4.09E+12 127.9425
142284. 0.00
24.7450 -0.00613 6791944. -42626. -1.08E-04 0.00 4.10E+12 147.3228
145589. 0.00
25.2500 -0.00675 6536354. -41676. -9.78E-05 0.00 4.10E+12 165.9521
148894. 0.00
25.7550 -0.00732 6286857. -40926. -8.83E-05 0.00 4.10E+12 81.6838
67644. 0.00
26.2600 -0.00782 6040358. -40408. -7.92E-05 0.00 4.10E+12 89.2418
69113. 0.00
26.7650 -0.00828 5797135. -39846. -7.05E-05 0.00 4.10E+12 96.4155
70582. 0.00
27.2700 -0.00868 5557451. -39241. -6.21E-05 0.00 4.10E+12 103.1917
72051. 0.00
27.7750 -0.00903 5321555. -38596. -5.41E-05 0.00 4.10E+12 109.5589
73520. 0.00
28.2800 -0.00933 5089682. -37914. -4.64E-05 0.00 4.11E+12 115.5072

74989. 0.00
28.7850 -0.00959 4862049. -37198. -3.90E-05 0.00 4.11E+12 121.0284
76458. 0.00
29.2900 -0.00981 4638860. -36449. -3.20E-05 0.00 4.11E+12 126.1158
77927. 0.00
29.7950 -0.00998 4420301. -35670. -2.53E-05 0.00 4.11E+12 130.7639
79396. 0.00
30.3000 -0.01011 4206543. -34865. -1.90E-05 0.00 4.11E+12 134.9689
80865. 0.00
30.8050 -0.01021 3997740. -34036. -1.29E-05 0.00 4.11E+12 138.7281
82334. 0.00
31.3100 -0.01027 3794032. -33185. -7.19E-06 0.00 4.11E+12 142.0401
83803. 0.00
31.8150 -0.01030 3595538. -32316. -1.75E-06 0.00 4.11E+12 144.9047
85271. 0.00
32.3200 -0.01029 3402365. -31430. 3.41E-06 0.00 4.12E+12 147.3228
86740. 0.00
32.8250 -0.01026 3214602. -30532. 8.28E-06 0.00 4.12E+12 149.2963
88209. 0.00
33.3300 -0.01019 3032320. -29622. 1.29E-05 0.00 4.12E+12 150.8280
89678. 0.00
33.8350 -0.01010 2855577. -28705. 1.72E-05 0.00 4.12E+12 151.9216
91147. 0.00
34.3400 -0.00998 2684412. -27782. 2.13E-05 0.00 4.12E+12 152.5815
92616. 0.00
34.8450 -0.00984 2518849. -26857. 2.51E-05 0.00 4.12E+12 152.8130
94085. 0.00
35.3500 -0.00968 2358898. -25931. 2.87E-05 0.00 4.12E+12 152.6220
95554. 0.00
35.8550 -0.00949 2204552. -25008. 3.21E-05 0.00 4.12E+12 152.0152
97023. 0.00
36.3600 -0.00929 2055787. -24090. 3.52E-05 0.00 4.12E+12 150.9996
98492. 0.00
36.8650 -0.00907 1912567. -23179. 3.81E-05 0.00 4.12E+12 149.5829
99961. 0.00
37.3700 -0.00883 1774840. -22278. 4.08E-05 0.00 4.12E+12 147.7733
101430. 0.00
37.8750 -0.00857 1642539. -21390. 4.33E-05 0.00 4.12E+12 145.5792
102899. 0.00
38.3800 -0.00830 1515584. -20515. 4.56E-05 0.00 4.12E+12 143.0095
104368. 0.00
38.8850 -0.00802 1393881. -19657. 4.78E-05 0.00 4.12E+12 140.0733
105837. 0.00
39.3900 -0.00772 1277321. -18819. 4.97E-05 0.00 4.12E+12 136.7800
107306. 0.00
39.8950 -0.00742 1165783. -18001. 5.15E-05 0.00 4.12E+12 133.1392
108775. 0.00
40.4000 -0.00710 1059135. -17206. 5.32E-05 0.00 4.12E+12 129.1606
110244. 0.00
40.9050 -0.00677 957230. -16436. 5.47E-05 0.00 4.12E+12 124.8543
111712. 0.00
41.4100 -0.00644 859910. -15694. 5.60E-05 0.00 4.12E+12 120.2303
113181. 0.00
41.9150 -0.00609 767005. -14980. 5.72E-05 0.00 4.12E+12 115.2988
114650. 0.00
42.4200 -0.00574 678334. -14297. 5.82E-05 0.00 4.12E+12 110.0701

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116119.       0.00
   42.9250   -0.00539    593705.    -13647.   5.92E-05       0.00   4.12E+12   104.5546
117588.       0.00
   43.4300   -0.00503    512915.    -13031.   6.00E-05       0.00   4.12E+12    98.7626
119057.       0.00
   43.9350   -0.00466    435752.    -12451.   6.07E-05       0.00   4.12E+12    92.7046
120526.       0.00
   44.4400   -0.00429    361994.    -11908.   6.13E-05       0.00   4.12E+12    86.3912
121995.       0.00
   44.9450   -0.00392    291408.    -11404.   6.18E-05       0.00   4.12E+12    79.8328
123464.       0.00
   45.4500   -0.00354    223753.    -10941.   6.21E-05       0.00   4.12E+12    73.0402
124933.       0.00
   45.9550   -0.00317    158781.     -9595.   6.24E-05       0.00   4.12E+12   371.3846
711011.       0.00
   46.4600   -0.00279    107448.     -7467.   6.26E-05       0.00   4.12E+12   330.7207
719274.       0.00
   46.9650   -0.00241     68260.     -5590.   6.27E-05       0.00   4.12E+12   288.9086
727536.       0.00
   47.4700   -0.00203     39681.     -3969.   6.28E-05       0.00   4.12E+12   245.9866
735799.       0.00
   47.9750   -0.00165     20136.     -2612.   6.29E-05       0.00   4.12E+12   201.9836
744062.       0.00
   48.4800   -0.00126      8009.     -1524.   6.29E-05       0.00   4.12E+12   156.9196
752325.       0.00
   48.9850  -8.83E-04      1644.   -712.8763   6.29E-05       0.00   4.12E+12   110.8075
760588.       0.00
   49.4900  -5.02E-04  -651.9010   -184.2570   6.29E-05       0.00   4.12E+12    63.6543
768850.       0.00
   49.9950  -1.21E-04  -609.8678     55.4665   6.29E-05       0.00   4.12E+12    15.4624
777113.       0.00
   50.5000   2.61E-04       0.00        0.00   6.29E-05       0.00   4.12E+12   -33.7682
392688.       0.00

* This analysis computed pile response using nonlinear moment-curvature rela-
  tionships. Values of total stress due to combined axial and bending stresses
  are computed only for elastic sections only and do not equal the actual
  stresses in concrete and steel. Stresses in concrete and steel may be inter-
  polated from the output for nonlinear bending properties relative to the
  magnitude of bending moment developed in the pile.


Output Summary for Load Case No. 1:

Pile-head deflection             =     0.20322977 inches
Computed slope at pile head      =    -0.00169626 radians
Maximum bending moment           =      13591988. inch-lbs
Maximum shear force              =        -45820. lbs
Depth of maximum bending moment  =     7.07000000 feet below pile head
Depth of maximum shear force     =    21.21000000 feet below pile head
Number of iterations             =            490
Number of zero deflection points =              2


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                Computed Values of Pile Loading and Deflection
                  for Lateral Loading for Load Case Number 2
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Pile-head conditions are Shear and Moment (Loading Type 1)

Shear force at pile head                              =       5782.0 lbs
Applied moment at pile head                           =    5747155.0 in-lbs
Axial thrust load on pile head                        =      16688.0 lbs

   Depth    Deflect.    Bending     Shear      Slope      Total     Bending   Soil Res.  Soil
Spr.  Distrib.
     X          y       Moment      Force         S       Stress    Stiffness      p
Es*h     Lat. Load
   feet      inches     in-lbs       lbs      radians     psi*      in-lb^2    lb/inch
lb/inch    lb/inch
---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
----------
      0.00    0.06416   5747155.      5782.  -4.33E-04       0.00   4.10E+12       0.00
0.00       0.00
    0.5050    0.06156   5782237.      5782.  -4.25E-04       0.00   4.10E+12       0.00
0.00       0.00
    1.0100    0.05901   5817319.      5782.  -4.16E-04       0.00   4.10E+12       0.00
0.00       0.00
    1.5150    0.05652   5852399.      5782.  -4.08E-04       0.00   4.10E+12       0.00
0.00       0.00
    2.0200    0.05407   5887479.      5782.  -3.99E-04       0.00   4.10E+12       0.00
0.00       0.00
    2.5250    0.05168   5922558.      5778.  -3.90E-04       0.00   4.10E+12    -1.3954
163.6200       0.00
    3.0300    0.04934   5957585.      5688.  -3.81E-04       0.00   4.10E+12   -28.2434
3469.       0.00
    3.5350    0.04706   5991573.      5443.  -3.73E-04       0.00   4.10E+12   -52.6004
6774.       0.00
    4.0400    0.04483   6023629.      5058.  -3.64E-04       0.00   4.10E+12   -74.5543
10079.       0.00
    4.5450    0.04265   6052946.      4546.  -3.55E-04       0.00   4.10E+12   -94.1934
13384.       0.00
    5.0500    0.04053   6078804.      3923.  -3.46E-04       0.00   4.10E+12  -111.6068
16689.       0.00
    5.5550    0.03846   6100561.      3200.  -3.37E-04       0.00   4.10E+12  -126.8840
19994.       0.00
    6.0600    0.03644   6117659.      2391.  -3.28E-04       0.00   4.10E+12  -140.1147
23299.       0.00
    6.5650    0.03448   6129609.      1508.  -3.19E-04       0.00   4.10E+12  -151.3892
26605.       0.00
    7.0700    0.03258   6135999.   562.0352  -3.10E-04       0.00   4.10E+12  -160.7975
29910.       0.00
    7.5750    0.03073   6136484.  -435.5241  -3.01E-04       0.00   4.10E+12  -168.4300
33215.       0.00
    8.0800    0.02894   6130782.     -1474.  -2.92E-04       0.00   4.10E+12  -174.3764
36520.       0.00
    8.5850    0.02720   6118675.     -2544.  -2.83E-04       0.00   4.10E+12  -178.7265
39825.       0.00
    9.0900    0.02551   6100004.     -3636.  -2.73E-04       0.00   4.10E+12  -181.5693
43130.       0.00
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9.5950	0.02388	6074664.	-4740.	-2.64E-04	0.00	4.10E+12	-182.9932	46435.	0.00
10.1000	0.02231	6042603.	-5850.	-2.56E-04	0.00	4.10E+12	-183.0858	49740.	0.00
10.6050	0.02078	6003818.	-6956.	-2.47E-04	0.00	4.10E+12	-181.9335	53046.	0.00
11.1100	0.01932	5958350.	-8051.	-2.38E-04	0.00	4.10E+12	-179.6217	56351.	0.00
11.6150	0.01790	5906286.	-9129.	-2.29E-04	0.00	4.10E+12	-176.2342	59656.	0.00
12.1200	0.01654	5847748.	-10184.	-2.20E-04	0.00	4.10E+12	-171.8536	62961.	0.00
12.6250	0.01523	5782898.	-11210.	-2.12E-04	0.00	4.10E+12	-166.5605	66266.	0.00
13.1300	0.01397	5711931.	-12200.	-2.03E-04	0.00	4.10E+12	-160.4340	69571.	0.00
13.6350	0.01277	5635071.	-13152.	-1.95E-04	0.00	4.10E+12	-153.5511	72876.	0.00
14.1400	0.01161	5552572.	-14059.	-1.87E-04	0.00	4.10E+12	-145.9866	76181.	0.00
14.6450	0.01051	5464710.	-14919.	-1.78E-04	0.00	4.10E+12	-137.8135	79487.	0.00
15.1500	0.00945	5371787.	-15728.	-1.70E-04	0.00	4.10E+12	-129.1021	82792.	0.00
15.6550	0.00844	5274122.	-16483.	-1.63E-04	0.00	4.10E+12	-119.9206	86097.	0.00
16.1600	0.00748	5172052.	-17180.	-1.55E-04	0.00	4.11E+12	-110.3346	89402.	0.00
16.6650	0.00656	5065929.	-17819.	-1.47E-04	0.00	4.11E+12	-100.4071	92707.	0.00
17.1700	0.00569	4956119.	-18396.	-1.40E-04	0.00	4.11E+12	-90.1989	96012.	0.00
17.6750	0.00487	4842995.	-18911.	-1.33E-04	0.00	4.11E+12	-79.7678	99317.	0.00
18.1800	0.00408	4726941.	-19363.	-1.26E-04	0.00	4.11E+12	-69.1691	102622.	0.00
18.6850	0.00334	4608346.	-19749.	-1.19E-04	0.00	4.11E+12	-58.4554	105928.	0.00
19.1900	0.00265	4487604.	-20071.	-1.12E-04	0.00	4.11E+12	-47.6768	109233.	0.00
19.6950	0.00199	4365111.	-20327.	-1.06E-04	0.00	4.11E+12	-36.8804	112538.	0.00
20.2000	0.00137	4241262.	-20518.	-9.92E-05	0.00	4.11E+12	-26.1109	115843.	0.00
20.7050	7.84E-04	4116454.	-20644.	-9.30E-05	0.00	4.11E+12	-15.4101	119148.	0.00
21.2100	2.38E-04	3991079.	-20705.	-8.71E-05	0.00	4.11E+12	-4.8175	122453.	0.00
21.7150	-2.71E-04	3865527.	-20703.	-8.13E-05	0.00	4.11E+12	5.6302	125758.	0.00
22.2200	-7.47E-04	3740181.	-20637.	-7.57E-05	0.00	4.11E+12	15.8987	129063.	0.00
22.7250	-0.00119	3615418.	-20510.	-7.02E-05	0.00	4.11E+12	25.9560	132369.	0.00
23.2300	-0.00160	3491608.	-20323.	-6.50E-05	0.00	4.11E+12	35.7728	135674.	0.00
23.7350	-0.00198	3369111.	-20078.	-6.00E-05	0.00	4.12E+12	45.3216	138979.	0.00
24.2400	-0.00232	3248278.	-19775.	-5.51E-05	0.00	4.12E+12	54.5772	142284.	0.00
24.7450	-0.00264	3129449.	-19417.	-5.04E-05	0.00	4.12E+12	63.5166	145589.	0.00
25.2500	-0.00294	3012952.	-19006.	-4.59E-05	0.00	4.12E+12	72.1182	148894.	0.00
25.7550	-0.00320	2899103.	-18679.	-4.15E-05	0.00	4.12E+12	35.7168	67644.	0.00
26.2600	-0.00344	2786565.	-18452.	-3.73E-05	0.00	4.12E+12	39.2143	69113.	0.00
26.7650	-0.00365	2675466.	-18205.	-3.33E-05	0.00	4.12E+12	42.5381	70582.	0.00
27.2700	-0.00384	2565930.	-17937.	-2.95E-05	0.00	4.12E+12	45.6819	72051.	0.00
27.7750	-0.00401	2458071.	-17652.	-2.58E-05	0.00	4.12E+12	48.6402	73520.	0.00
28.2800	-0.00415	2351997.	-17348.	-2.22E-05	0.00	4.12E+12	51.4083	74989.	0.00
28.7850	-0.00428	2247811.	-17029.	-1.88E-05	0.00	4.12E+12	53.9823	76458.	0.00
29.2900	-0.00438	2145608.	-16695.	-1.56E-05	0.00	4.12E+12	56.3589	77927.	0.00
29.7950	-0.00447	2045473.	-16347.	-1.25E-05	0.00	4.12E+12	58.5354	79396.	0.00
30.3000	-0.00453	1947488.	-15986.	-9.60E-06	0.00	4.12E+12	60.5101	80865.	0.00
30.8050	-0.00458	1851725.	-15614.	-6.80E-06	0.00	4.12E+12	62.2814	82334.	0.00
31.3100	-0.00462	1758249.	-15232.	-4.15E-06	0.00	4.12E+12	63.8487	83803.	0.00
31.8150	-0.00463	1667117.	-14841.	-1.63E-06	0.00	4.13E+12	65.2117	85271.	0.00
32.3200	-0.00464	1578380.	-14442.	7.49E-07	0.00	4.13E+12	66.3706	86740.	0.00
32.8250	-0.00463	1492079.	-14037.	3.00E-06	0.00	4.13E+12	67.3263	88209.	0.00
33.3300	-0.00460	1408252.	-13627.	5.14E-06	0.00	4.13E+12	68.0797	89678.	0.00
33.8350	-0.00456	1326924.	-13212.	7.14E-06	0.00	4.13E+12	68.6325	91147.	0.00
34.3400	-0.00451	1248116.	-12795.	9.04E-06	0.00	4.13E+12	68.9867	92616.	0.00
34.8450	-0.00445	1171842.	-12377.	1.08E-05	0.00	4.13E+12	69.1445	94085.	0.00
35.3500	-0.00438	1098106.	-11958.	1.25E-05	0.00	4.13E+12	69.1085	95554.	0.00
35.8550	-0.00430	1026909.	-11540.	1.40E-05	0.00	4.13E+12	68.8817	97023.	0.00
36.3600	-0.00421	958240.	-11124.	1.55E-05	0.00	4.13E+12	68.4674	98492.	0.00
36.8650	-0.00411	892086.	-10711.	1.69E-05	0.00	4.13E+12	67.8688	99961.	0.00
37.3700	-0.00401	828425.	-10302.	1.81E-05	0.00	4.13E+12	67.0897	101430.	0.00

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   37.8750   -0.00389    767227.     -9898.   1.93E-05       0.00   4.13E+12    66.1339
102899.       0.00
   38.3800   -0.00377    708457.     -9501.   2.04E-05       0.00   4.13E+12    65.0054
104368.       0.00
   38.8850   -0.00365    652075.     -9111.   2.14E-05       0.00   4.13E+12    63.7085
105837.       0.00
   39.3900   -0.00352    598032.     -8729.   2.23E-05       0.00   4.13E+12    62.2474
107306.       0.00
   39.8950   -0.00338    546275.     -8357.   2.31E-05       0.00   4.13E+12    60.6264
108775.       0.00
   40.4000   -0.00323    496744.     -7995.   2.39E-05       0.00   4.13E+12    58.8502
110244.       0.00
   40.9050   -0.00309    449375.     -7644.   2.46E-05       0.00   4.13E+12    56.9234
111712.       0.00
   41.4100   -0.00294    404095.     -7305.   2.52E-05       0.00   4.13E+12    54.8505
113181.       0.00
   41.9150   -0.00278    360830.     -6980.   2.58E-05       0.00   4.13E+12    52.6363
114650.       0.00
   42.4200   -0.00262    319498.     -6668.   2.63E-05       0.00   4.13E+12    50.2856
116119.       0.00
   42.9250   -0.00246    280013.     -6370.   2.67E-05       0.00   4.13E+12    47.8032
117588.       0.00
   43.4300   -0.00230    242283.     -6089.   2.71E-05       0.00   4.13E+12    45.1939
119057.       0.00
   43.9350   -0.00213    206213.     -5823.   2.74E-05       0.00   4.13E+12    42.4625
120526.       0.00
   44.4400   -0.00197    171702.     -5574.   2.77E-05       0.00   4.13E+12    39.6141
121995.       0.00
   44.9450   -0.00180    138646.     -5343.   2.79E-05       0.00   4.13E+12    36.6534
123464.       0.00
   45.4500   -0.00163    106936.     -5130.   2.81E-05       0.00   4.13E+12    33.5854
124933.       0.00
   45.9550   -0.00146     76459.     -4510.   2.83E-05       0.00   4.13E+12   171.0859
711011.       0.00
   46.4600   -0.00129     52265.     -3529.   2.84E-05       0.00   4.13E+12   152.7067
719274.       0.00
   46.9650   -0.00111     33679.     -2661.   2.84E-05       0.00   4.13E+12   133.8037
727536.       0.00
   47.4700  -9.42E-04     20007.     -1909.   2.85E-05       0.00   4.13E+12   114.3951
735799.       0.00
   47.9750  -7.70E-04     10535.     -1276.   2.85E-05       0.00   4.13E+12    94.4946
744062.       0.00
   48.4800  -5.97E-04      4534.  -765.2392   2.85E-05       0.00   4.13E+12    74.1119
752325.       0.00
   48.9850  -4.24E-04      1255.  -379.3223   2.85E-05       0.00   4.13E+12    53.2534
760588.       0.00
   49.4900  -2.52E-04   -68.8050  -121.2392   2.85E-05       0.00   4.13E+12    31.9226
768850.       0.00
   49.9950  -7.89E-05  -220.2404     6.1525   2.85E-05       0.00   4.13E+12    10.1209
777113.       0.00
   50.5000   9.38E-05       0.00       0.00   2.85E-05       0.00   4.13E+12   -12.1514
392688.       0.00

* This analysis computed pile response using nonlinear moment-curvature rela-
  tionships. Values of total stress due to combined axial and bending stresses
  are computed only for elastic sections only and do not equal the actual
  stresses in concrete and steel. Stresses in concrete and steel may be inter-
  polated from the output for nonlinear bending properties relative to the
  magnitude of bending moment developed in the pile.


Output Summary for Load Case No. 2:

Pile-head deflection             =     0.06416126 inches
Computed slope at pile head      =    -0.00043335 radians
Maximum bending moment           =       6136484. inch-lbs
Maximum shear force              =        -20705. lbs
Depth of maximum bending moment  =     7.57500000 feet below pile head
Depth of maximum shear force     =    21.21000000 feet below pile head
Number of iterations             =              6
Number of zero deflection points =              2


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                Computed Values of Pile Loading and Deflection
                  for Lateral Loading for Load Case Number 3
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Pile-head conditions are Shear and Moment (Loading Type 1)

Shear force at pile head                              =       6210.0 lbs
Applied moment at pile head                           =    6231168.0 in-lbs
Axial thrust load on pile head                        =      28916.0 lbs

   Depth    Deflect.    Bending     Shear      Slope      Total     Bending   Soil Res.  Soil
Spr.  Distrib.
     X          y        Moment      Force         S       Stress    Stiffness       p
Es*h     Lat. Load
   feet      inches     in-lbs       lbs      radians     psi*      in-lb^2    lb/inch
lb/inch    lb/inch
---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------
---------- ----------
      0.00    0.06948   6231168.      6210.  -4.70E-04       0.00   4.10E+12       0.00
0.00       0.00
    0.5050    0.06666   6268882.      6210.  -4.60E-04       0.00   4.10E+12       0.00
0.00       0.00
    1.0100    0.06390   6306595.      6210.  -4.51E-04       0.00   4.10E+12       0.00
0.00       0.00
    1.5150    0.06120   6344305.      6210.  -4.42E-04       0.00   4.10E+12       0.00
0.00       0.00
    2.0200    0.05855   6382015.      6210.  -4.32E-04       0.00   4.10E+12       0.00
0.00       0.00
    2.5250    0.05596   6419722.      6205.  -4.23E-04       0.00   4.10E+12    -1.5108
163.6200       0.00
    3.0300    0.05342   6457372.      6108.  -4.13E-04       0.00   4.10E+12   -30.5793
3469.       0.00
    3.5350    0.05095   6493898.      5843.  -4.04E-04       0.00   4.10E+12   -56.9489
6774.       0.00
    4.0400    0.04853   6528331.      5426.  -3.94E-04       0.00   4.10E+12   -80.7151
10079.       0.00
    4.5450    0.04617   6559798.      4872.  -3.84E-04       0.00   4.10E+12  -101.9736
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13384.	0.00							
5.0500	0.04387	6587518.	4197.	-3.75E-04	0.00	4.10E+12	-120.8211	
16689.	0.00							
5.5550	0.04163	6610800.	3415.	-3.65E-04	0.00	4.10E+12	-137.3545	
19994.	0.00							
6.0600	0.03945	6629035.	2539.	-3.55E-04	0.00	4.10E+12	-151.6712	
23299.	0.00							
6.5650	0.03733	6641699.	1583.	-3.45E-04	0.00	4.10E+12	-163.8690	
26605.	0.00							
7.0700	0.03526	6648344.	559.2537	-3.35E-04	0.00	4.10E+12	-174.0456	
29910.	0.00							
7.5750	0.03326	6648595.	-520.4699	-3.26E-04	0.00	4.10E+12	-182.2988	
33215.	0.00							
8.0800	0.03132	6642150.	-1645.	-3.16E-04	0.00	4.10E+12	-188.7261	
36520.	0.00							
8.5850	0.02943	6628772.	-2803.	-3.06E-04	0.00	4.10E+12	-193.4246	
39825.	0.00							
9.0900	0.02761	6608290.	-3984.	-2.96E-04	0.00	4.10E+12	-196.4909	
43130.	0.00							
9.5950	0.02584	6580590.	-5179.	-2.86E-04	0.00	4.10E+12	-198.0208	
46435.	0.00							
10.1000	0.02414	6545616.	-6380.	-2.77E-04	0.00	4.10E+12	-198.1091	
49740.	0.00							
10.6050	0.02249	6503365.	-7576.	-2.67E-04	0.00	4.10E+12	-196.8496	
53046.	0.00							
11.1100	0.02090	6453883.	-8762.	-2.58E-04	0.00	4.10E+12	-194.3348	
56351.	0.00							
11.6150	0.01937	6397263.	-9928.	-2.48E-04	0.00	4.10E+12	-190.6556	
59656.	0.00							
12.1200	0.01789	6333640.	-11069.	-2.39E-04	0.00	4.10E+12	-185.9014	
62961.	0.00							
12.6250	0.01648	6263189.	-12178.	-2.29E-04	0.00	4.10E+12	-180.1596	
66266.	0.00							
13.1300	0.01511	6186119.	-13250.	-2.20E-04	0.00	4.10E+12	-173.5159	
69571.	0.00							
13.6350	0.01381	6102676.	-14279.	-2.11E-04	0.00	4.10E+12	-166.0536	
72876.	0.00							
14.1400	0.01256	6013133.	-15260.	-2.02E-04	0.00	4.10E+12	-157.8540	
76181.	0.00							
14.6450	0.01136	5917792.	-16190.	-1.93E-04	0.00	4.10E+12	-148.9960	
79487.	0.00							
15.1500	0.01021	5816977.	-17064.	-1.85E-04	0.00	4.10E+12	-139.5558	
82792.	0.00							
15.6550	0.00912	5711036.	-17880.	-1.76E-04	0.00	4.10E+12	-129.6073	
86097.	0.00							
16.1600	0.00808	5600334.	-18634.	-1.68E-04	0.00	4.10E+12	-119.2216	
89402.	0.00							
16.6650	0.00709	5485252.	-19324.	-1.59E-04	0.00	4.10E+12	-108.4671	
92707.	0.00							
17.1700	0.00615	5366185.	-19948.	-1.51E-04	0.00	4.10E+12	-97.4093	
96012.	0.00							
17.6750	0.00525	5243540.	-20504.	-1.44E-04	0.00	4.10E+12	-86.1110	
99317.	0.00							
18.1800	0.00441	5117731.	-20991.	-1.36E-04	0.00	4.11E+12	-74.6319	
102622.	0.00							
18.6850	0.00361	4989180.	-21408.	-1.29E-04	0.00	4.11E+12	-63.0289	
105928.	0.00							
19.1900	0.00285	4858313.	-21754.	-1.21E-04	0.00	4.11E+12	-51.3562	
109233.	0.00							
19.6950	0.00214	4725559.	-22030.	-1.14E-04	0.00	4.11E+12	-39.6649	
112538.	0.00							
20.2000	0.00146	4591347.	-22235.	-1.07E-04	0.00	4.11E+12	-28.0033	
115843.	0.00							
20.7050	8.35E-04	4456105.	-22370.	-1.01E-04	0.00	4.11E+12	-16.4168	
119148.	0.00							
21.2100	2.45E-04	4320260.	-22435.	-9.42E-05	0.00	4.11E+12	-4.9480	
122453.	0.00							
21.7150	-3.07E-04	4184231.	-22430.	-8.79E-05	0.00	4.11E+12	6.3633	
125758.	0.00							
22.2200	-8.21E-04	4048435.	-22358.	-8.19E-05	0.00	4.11E+12	17.4799	
129063.	0.00							
22.7250	-0.00130	3913280.	-22219.	-7.60E-05	0.00	4.11E+12	28.3674	
132369.	0.00							
23.2300	-0.00174	3779166.	-22015.	-7.03E-05	0.00	4.11E+12	38.9936	
135674.	0.00							
23.7350	-0.00215	3646483.	-21747.	-6.48E-05	0.00	4.11E+12	49.3292	
138979.	0.00							
24.2400	-0.00253	3515610.	-21418.	-5.96E-05	0.00	4.11E+12	59.3468	
142284.	0.00							
24.7450	-0.00287	3386916.	-21029.	-5.45E-05	0.00	4.12E+12	69.0214	
145589.	0.00							
25.2500	-0.00319	3260756.	-20583.	-4.96E-05	0.00	4.12E+12	78.3302	
148894.	0.00							
25.7550	-0.00347	3137471.	-20228.	-4.49E-05	0.00	4.12E+12	38.7786	
67644.	0.00							
26.2600	-0.00373	3015610.	-19981.	-4.04E-05	0.00	4.12E+12	42.5633	
69113.	0.00							
26.7650	-0.00396	2895311.	-19713.	-3.60E-05	0.00	4.12E+12	46.1596	
70582.	0.00							
27.2700	-0.00417	2776707.	-19423.	-3.18E-05	0.00	4.12E+12	49.5610	
72051.	0.00							
27.7750	-0.00435	2659921.	-19112.	-2.78E-05	0.00	4.12E+12	52.7614	
73520.	0.00							
28.2800	-0.00451	2545073.	-18784.	-2.40E-05	0.00	4.12E+12	55.7558	
74989.	0.00							
28.7850	-0.00464	2432272.	-18437.	-2.03E-05	0.00	4.12E+12	58.5399	
76458.	0.00							
29.2900	-0.00475	2321619.	-18075.	-1.68E-05	0.00	4.12E+12	61.1101	
77927.	0.00							
29.7950	-0.00484	2213211.	-17697.	-1.35E-05	0.00	4.12E+12	63.4638	
79396.	0.00							
30.3000	-0.00492	2107132.	-17306.	-1.03E-05	0.00	4.12E+12	65.5986	
80865.	0.00							
30.8050	-0.00497	2003462.	-16903.	-7.31E-06	0.00	4.12E+12	67.5133	
82334.	0.00							
31.3100	-0.00500	1902271.	-16489.	-4.44E-06	0.00	4.12E+12	69.2069	
83803.	0.00							
31.8150	-0.00502	1803620.	-16065.	-1.72E-06	0.00	4.12E+12	70.6793	
85271.	0.00							
32.3200	-0.00503	1707565.	-15633.	8.64E-07	0.00	4.12E+12	71.9307	
86740.	0.00							
32.8250	-0.00501	1614151.	-15194.	3.30E-06	0.00	4.12E+12	72.9619	

```
88209.       0.00
   33.3300   -0.00499   1523416.    -14749.   5.61E-06       0.00   4.12E+12    73.7743
89678.       0.00
   33.8350   -0.00494   1435390.    -14300.   7.78E-06       0.00   4.12E+12    74.3694
91147.       0.00
   34.3400   -0.00489   1350095.    -13848.   9.83E-06       0.00   4.12E+12    74.7495
92616.       0.00
   34.8450   -0.00483   1267544.    -13395.   1.18E-05       0.00   4.12E+12    74.9170
94085.       0.00
   35.3500   -0.00475   1187744.    -12941.   1.36E-05       0.00   4.12E+12    74.8747
95554.       0.00
   35.8550   -0.00466   1110694.    -12488.   1.52E-05       0.00   4.12E+12    74.6259
97023.       0.00
   36.3600   -0.00456   1036383.    -12037.   1.68E-05       0.00   4.12E+12    74.1740
98492.       0.00
   36.8650   -0.00446    964797.    -11590.   1.83E-05       0.00   4.12E+12    73.5227
99961.       0.00
   37.3700   -0.00434    895910.    -11147.   1.97E-05       0.00   4.12E+12    72.6759
101430.      0.00
   37.8750   -0.00422    829692.    -10709.   2.09E-05       0.00   4.12E+12    71.6379
102899.      0.00
   38.3800   -0.00409    766105.    -10279.   2.21E-05       0.00   4.12E+12    70.4130
104368.      0.00
   38.8850   -0.00395    705103.     -9857.   2.32E-05       0.00   4.12E+12    69.0057
105837.      0.00
   39.3900   -0.00381    646635.     -9443.   2.42E-05       0.00   4.12E+12    67.4206
107306.      0.00
   39.8950   -0.00366    590643.     -9040.   2.51E-05       0.00   4.12E+12    65.6626
108775.      0.00
   40.4000   -0.00350    537062.     -8648.   2.59E-05       0.00   4.12E+12    63.7365
110244.      0.00
   40.9050   -0.00334    485821.     -8268.   2.67E-05       0.00   4.12E+12    61.6473
111712.      0.00
   41.4100   -0.00318    436845.     -7901.   2.73E-05       0.00   4.12E+12    59.4001
113181.      0.00
   41.9150   -0.00301    390049.     -7548.   2.79E-05       0.00   4.12E+12    56.9999
114650.      0.00
   42.4200   -0.00284    345347.     -7211.   2.85E-05       0.00   4.12E+12    54.4518
116119.      0.00
   42.9250   -0.00267    302645.     -6889.   2.90E-05       0.00   4.12E+12    51.7612
117588.      0.00
   43.4300   -0.00249    261843.     -6584.   2.94E-05       0.00   4.12E+12    48.9332
119057.      0.00
   43.9350   -0.00231    222838.     -6296.   2.97E-05       0.00   4.12E+12    45.9731
120526.      0.00
   44.4400   -0.00213    185521.     -6027.   3.00E-05       0.00   4.12E+12    42.8862
121995.      0.00
   44.9450   -0.00195    149779.     -5777.   3.03E-05       0.00   4.12E+12    39.6778
123464.      0.00
   45.4500   -0.00176    115495.     -5547.   3.05E-05       0.00   4.12E+12    36.3533
124933.      0.00
   45.9550   -0.00158     82545.     -4875.   3.06E-05       0.00   4.12E+12   185.1641
711011.      0.00
   46.4600   -0.00139     56395.     -3814.   3.07E-05       0.00   4.12E+12   165.2486
719274.      0.00
   46.9650   -0.00121     36314.     -2874.   3.08E-05       0.00   4.12E+12   144.7658
727536.      0.00
   47.4700   -0.00102     21549.     -2061.   3.08E-05       0.00   4.12E+12   123.7354
735799.      0.00
   47.9750  -8.32E-04     11328.     -1376.   3.09E-05       0.00   4.12E+12   102.1722
744062.      0.00
   48.4800  -6.45E-04      4859.   -823.9211   3.09E-05       0.00   4.12E+12    80.0866
752325.      0.00
   48.9850  -4.58E-04      1331.   -407.0773   3.09E-05       0.00   4.12E+12    57.4856
760588.      0.00
   49.4900  -2.71E-04   -85.8566   -128.7461   3.09E-05       0.00   4.12E+12    34.3729
768850.      0.00
   49.9950  -8.38E-05   -240.3194     7.9766   3.09E-05       0.00   4.12E+12    10.7501
777113.      0.00
   50.5000   1.03E-04       0.00       0.00   3.09E-05       0.00   4.12E+12   -13.3826
392688.      0.00

* This analysis computed pile response using nonlinear moment-curvature rela-
  tionships. Values of total stress due to combined axial and bending stresses
  are computed only for elastic sections only and do not equal the actual
  stresses in concrete and steel. Stresses in concrete and steel may be inter-
  polated from the output for nonlinear bending properties relative to the
  magnitude of bending moment developed in the pile.


Output Summary for Load Case No. 3:

Pile-head deflection             =     0.06947958 inches
Computed slope at pile head      =    -0.00046957 radians
Maximum bending moment           =       6648595. inch-lbs
Maximum shear force              =        -22435. lbs
Depth of maximum bending moment  =     7.57500000 feet below pile head
Depth of maximum shear force     =    21.21000000 feet below pile head
Number of iterations             =              6
Number of zero deflection points =              2


--------------------------------------------------------------------------------
            Summary of Pile-head Responses for Conventional Analyses
--------------------------------------------------------------------------------

Definitions of Pile-head Loading Conditions:

Load Type 1: Load 1 = Shear, V, lbs, and Load 2 = Moment, M, in-lbs
Load Type 2: Load 1 = Shear, V, lbs, and Load 2 = Slope, S, radians
Load Type 3: Load 1 = Shear, V, lbs, and Load 2 = Rot. Stiffness, R, in-lbs/rad.
Load Type 4: Load 1 = Top Deflection, y, inches, and Load 2 = Moment, M, in-lbs
Load Type 5: Load 1 = Top Deflection, y, inches, and Load 2 = Slope, S, radians


Load Load                Load                  Axial    Pile-head  Pile-head  Max Shear Max
Moment
Case Type   Pile-head    Type     Pile-head   Loading  Deflection  Rotation    in Pile    in
Pile
 No.  1      Load 1       2        Load 2       lbs      inches     radians      lbs
in-lbs
---- ----- ---------- ---------- ---------- ---------- ---------- ---------- ----------
```

```
----------
  1  V, lb     12849.  M, in-lb    1.28E+07     26701.     0.2032   -0.00170    -45820.
1.36E+07
  2  V, lb      5782.  M, in-lb    5747155.     16688.    0.06416  -4.33E-04    -20705.
6136484.
  3  V, lb      6210.  M, in-lb    6231168.     28916.    0.06948  -4.70E-04    -22435.
6648595.


Maximum pile-head deflection = 0.2032297745 inches
Maximum pile-head rotation   = -0.0016962550 radians = -0.097188 deg.

The analysis ended normally.
```

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A valmont COMPANY
1545 Pidco Drive
Plymouth, IN 46563
Phone: 574.936.4221
Fax: 574.936.8925
Email: SP1Engineering@valmont.com
www.sitepro1.com

June 3, 2022

Site Pro 1 / Valmont Mounting System:

Part Number = RMVD12 -3xxx & RMVD12-NPNH
Part Description = 12' Monopole Dual Triple T-arm kit. 2.5 sch 40 mast pipe

Mount EPA & Weight (No antenna pipes, (0.67*EPA)):

EPA_N	= 21.51(14.35) Sq-Ft	$EPA_{N\ (0.5"\ Ice)}$	= 26.29(17.54) Sq-Ft	$EPA_{N\ (1"\ Ice)}$	= 31.18(20.79) Sq-Ft
EPA_T	= 20.57(13.72) Sq-Ft	$EPA_{T\ (0.5"\ Ice)}$	= 25.86(17.24) Sq-Ft	$EPA_{T\ (1"\ Ice)}$	= 30.37(20.24) Sq-Ft
Weight = 2081 lb		$Weight_{(0.5"\ Ice)}$	=2317 lb	$Weight_{(1"\ Ice)}$	= 2620 lb

Classification Rating:

M1300R(1300)-4[6]
M800R(1300)-4[24]

Design Standards

ANSI/TIA-222-G-2012
ANSI/TIA-222-H-2018
AT&T Mount Classification
ASCE 7-16
International Building Code 2018
TIA-5053

Analysis and Modeling Technique

An elastic, three-dimensional, frame, truss model was developed to examine the structural behavior of the mount. All orientations in the engineering model correspond with the assembly drawing constraints. The mount was analyzed with four (4) mounting locations (antenna, radio etc. + pipe) evenly spaced across the face of the mount, with six (6) vertical eccentricity and twenty-four (24) inch eccentricity. Wind directions considered were perpendicular (normal) to the face of the frame and at 30 degree increments up to 90 degrees (tangential) to the face of the frame. Wind, dead weight and ice weight on the mount was also included in the model.

Modeling Software

Autodesk Inventor
RISA-3D

SITE PRO 1
A valmont COMPANY
1545 Pidco Drive
Plymouth, IN 46563
Phone: 574.936.4221
Fax: 574.936.8925
Email: SP1Engineering@valmont.com
www.sitepro1.com

Analysis Design Criteria

Maximum Mount Height	400'
Maximum Ultimate Wind Speed, no Ice	180 mph 3 sec gust
Maximum Design Wind Speed, no Ice	140 mph 3 sec gust
Maximum Design Wind Speed on Ice	60 mph 3 sec gust
Structure Class	I or II
Exposure Category	B or C
Topographic Category	I
Maximum Design Ice Thickness, t_i	1" (2.75" factored ice)
Wind Direction Probability Factor, K_d	0.95
Gust Effect Factor, G_h	1.0

Capacity Results

The following factored loads at each mounting location represent the capacity of the mount based on the criteria and modeling technique described above. Capacity below represents 6 inch offset

Normal Wind Load (no ice), F_{no}	.....1300 lb	[813lb Non-Factored]
Tangential Wind Load (no ice), F_{to}	.....1300 lb	[813 lb Non-Factored]
Vertical (Dead) Load, F_{zo}	.....650 lb	[542 lb Non-Factored]
Normal Wind on Ice, F_{ni}	.....325 lb	
Tangential Wind on Ice, F_{ti}	.....325 lb	
Vertical (Dead + Ice) Load, F_{zi}	.....1300 lb	
Normal Maintenance Wind Load, F_{nm}	.....130 lb	
Tangential Maintenance Wind Load, F_{tm}	.....130 lb	
Vertical Dead Load, F_{zm}	.....650 lb	[417 lb Non-Factored]
Vertical Live Load, L_M*	.....750 lb	[500 lb Non-Factored]

* In addition to a nominal Live Load of two (2) 250 lb concentrated on either side of a mounting location to provide access for climbers.

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A valmont COMPANY
1545 Pidco Drive
Plymouth, IN 46563
Phone: 574.936.4221
Fax: 574.936.8925
Email: SP1Engineering@valmont.com
www.sitepro1.com

6 inch offset

Effective Projected Area $(EPA)_A$ (sq-ft)											
WIND LOAD: 1.0000 kips											
HEIGHT	WIND SPEED (mph)										
(ft)	90	100	110	120	130	140	150	160	170	180	190
50	46.4112	37.5931	31.0687	26.1063	22.2444	19.1802	16.7080	14.6848	13.0080	11.6028	10.4136
100	40.1096	32.4888	26.8502	22.5617	19.2241	16.5759	14.4395	12.6909	11.2418	10.0274	8.9997
150	36.8279	29.8306	24.6534	20.7157	17.6512	15.2197	13.2580	11.6526	10.3220	9.2070	8.2633
200	34.6636	28.0775	23.2046	19.4983	16.6139	14.3253	12.4789	10.9678	9.7154	8.6659	7.7777
250	33.0729	26.7890	22.1397	18.6035	15.8515	13.6679	11.9062	10.4645	9.2696	8.2682	
300	31.8275	25.7802	21.3060	17.9029	15.2546	13.1532	11.4579	10.0704	8.9205	7.9569	
350	30.8111	24.9570	20.6256	17.3313	14.7675	12.7332	11.0920	9.7488	8.6357	7.7028	
400	29.9570	24.2652	20.0539	16.8508	14.3581	12.3802	10.7845	9.4786	8.3963	7.4893	
450	29.2234	23.6709	19.5627	16.4381	14.0065	12.0770	10.5204	9.2465	8.1906		
500	28.5823	23.1517	19.1336	16.0775	13.6992	11.8121	10.2896	9.0436	8.0110		

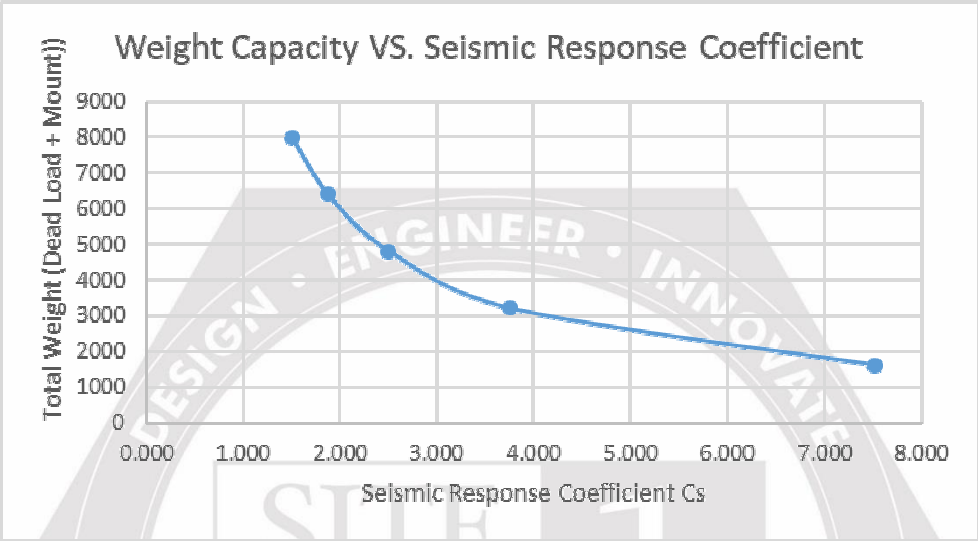
24 inch offset

Effective Projected Area $(EPA)_A$ (sq-ft)											
WIND LOAD: 1.3000 kips											
HEIGHT	WIND SPEED (mph)										
(ft)	90	100	110	120	130	140	150	160	170	180	190
50	60.3346	48.8710	40.3893	33.9382	28.9178	24.9342	21.7205	19.0903	16.9104	15.0837	13.5377
100	52.1425	42.2354	34.9053	29.3302	24.9914	21.5487	18.7713	16.4982	14.6143	13.0356	11.6996
150	47.8762	38.7798	32.0494	26.9304	22.9466	19.7856	17.2354	15.1483	13.4186	11.9691	10.7423
200	45.0627	36.5008	30.1659	25.3478	21.5981	18.6228	16.2226	14.2581	12.6300	11.2657	10.1110
250	42.9947	34.8257	28.7816	24.1845	20.6069	17.7682	15.4781	13.6038	12.0504	10.7487	
300	41.3757	33.5143	27.6978	23.2738	19.8310	17.0991	14.8952	13.0915	11.5966	10.3439	
350	40.0545	32.4441	26.8133	22.5307	19.1977	16.5531	14.4196	12.6735	11.2263	10.0136	
400	38.9442	31.5448	26.0701	21.9061	18.6655	16.0943	14.0199	12.3222	10.9151	9.7360	
450	37.9904	30.7722	25.4316	21.3696	18.2084	15.7001	13.6765	12.0204	10.6478		
500	37.1570	30.0971	24.8737	20.9008	17.8090	15.3557	13.3765	11.7567	10.4142		

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A valmont COMPANY
1545 Pidco Drive
Plymouth, IN 46563
Phone: 574.936.4221
Fax: 574.936.8925
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www.sitepro1.com

Seismic Results

The following Seismic Response Coefficient chart below represent the allowable weight capacity of the bracket based on the criteria and modeling technique described in TIA-222-H Section 2.7.7.1.1. Total allowable seismic shear must be less than or equal to the Capacity Results (F_{no}) stated above.



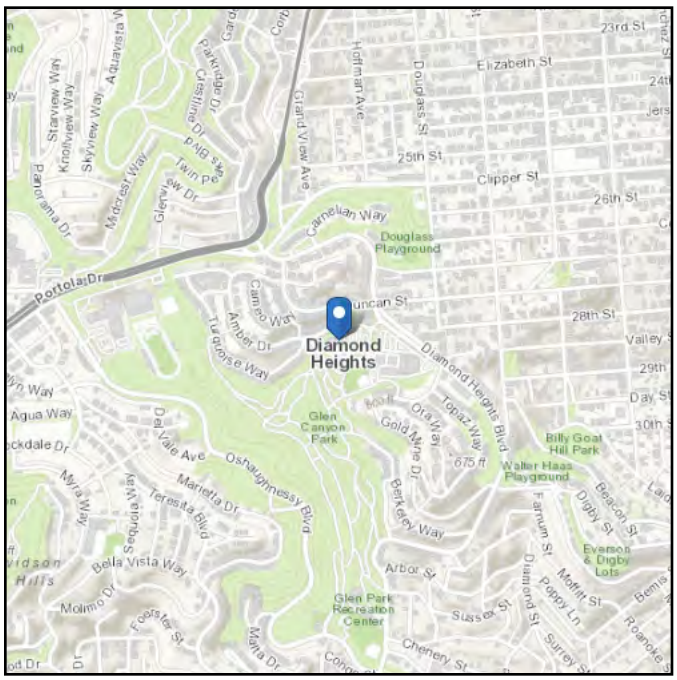
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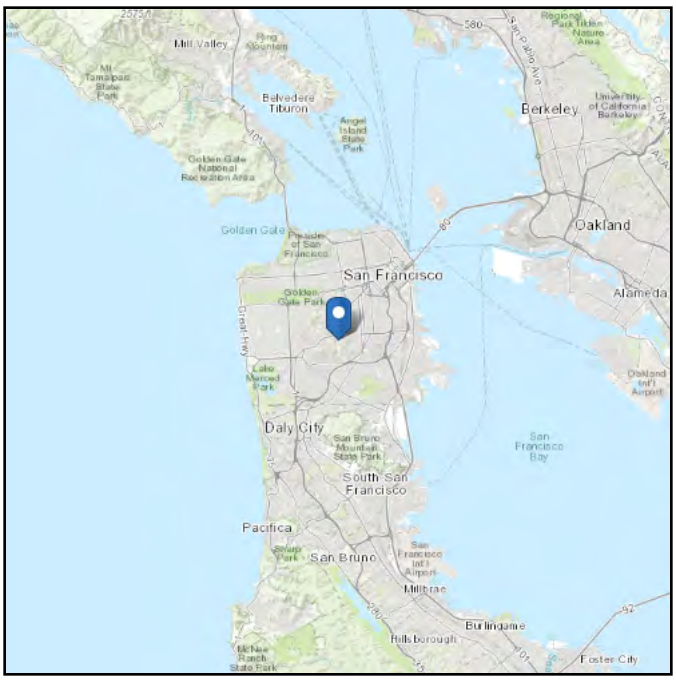
ASCE Hazards Report

Address:
350 Amber Dr
San Francisco, California
94131

Standard: ASCE/SEI 7-22
Risk Category: III
Soil Class: D - Stiff Soil

Latitude: 37.744251
Longitude: -122.441405
Elevation: 558.5025355328418 ft (NAVD 88)





Wind

Results:

Wind Speed	99 Vmph
10-year MRI	63 Vmph
25-year MRI	70 Vmph
50-year MRI	74 Vmph
100-year MRI	78 Vmph
300-year MRI	86 Vmph
700-year MRI	92 Vmph
1,700-year MRI	99 Vmph
3,000-year MRI	103 Vmph
10,000-year MRI	112 Vmph
100,000-year MRI	128 Vmph
1,000,000-year MRI	147 Vmph

Data Source: ASCE/SEI 7-22, Fig. 26.5-1C and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Tue Jan 27 2026

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-22 Standard. Wind speeds correspond to approximately a 3% probability of exceedance in 50 years (annual exceedance probability = 0.000588, MRI = 1,700 years). Values for 10-year MRI, 25-year MRI, 50-year MRI and 100-year MRI are Service Level wind speeds, all other wind speeds are Ultimate wind speeds.

Site is not in a hurricane-prone region as defined in ASCE/SEI 7-22 Section 26.2.

Seismic

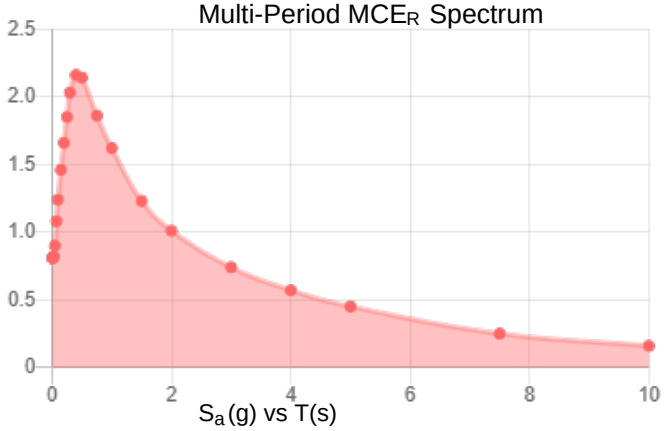
Site Soil Class: D - Stiff Soil

Results:

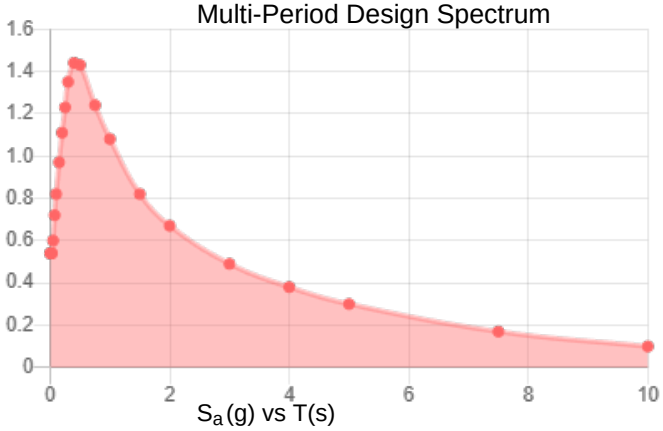
PGA_M :	0.67	T_L :	12
S_{MS} :	1.95	S_S :	1.84
S_{M1} :	2.07	S_1 :	0.7
S_{DS} :	1.3	V_{S30} :	260
S_{D1} :	1.38		

Seismic Design Category: D

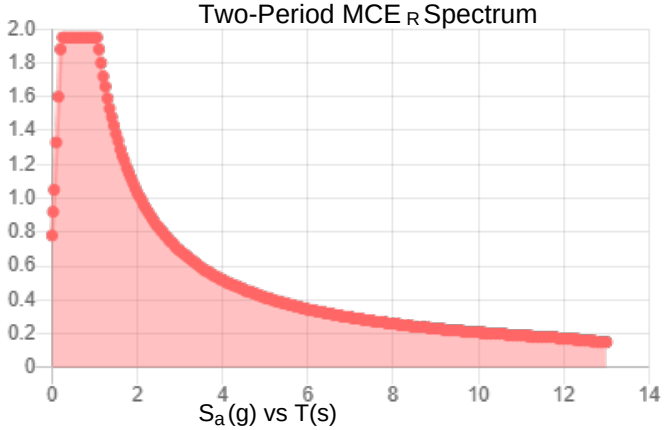
Multi-Period MCE_R Spectrum



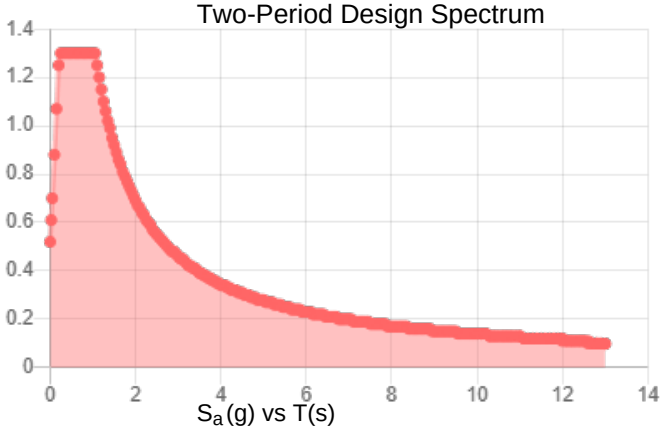
Multi-Period Design Spectrum



Two-Period MCE_R Spectrum



Two-Period Design Spectrum



MCE_R Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Design Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Data Accessed: Tue Jan 27 2026

Date Source:
USGS Seismic Design Maps based on ASCE/SEI 7-22 and ASCE/SEI 7-22 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-22 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	N/A
Concurrent Temperature:	N/A
3-s Gust Speed	N/A
Data Source:	Standard ASCE/SEI 7-22, Figs. 10-2 through 10-8
Date Accessed:	Tue Jan 27 2026

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain for 250, 500, 1,000, and 1,400-year mean recurrence intervals along with concurrent 3-s gust speeds and concurrent air temperatures. The shading indicates special icing regions, with elevations above 2,100 ft (640 m) in the east, 6,000 ft (1829 m) in the west, and 1,600 ft (488 m) in Alaska, with sparse weather station data for determining design ice loads. In these regions, as well as in regions with complex terrain causing unusual icing conditions and regions where snow or in-cloud icing results in larger loads, the mapped values should be adjusted based on a combination of local historical records and experience, reanalysis data, and numerical weather prediction systems.

The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE Hazard Tool.

Exhibit E

Exhibit E

Thomas William Oldag

Retired Firefighter / Fire Investigator

toldag@icloud.com

530 919-4521

I, Thomas W. Oldag, declare as follows:

I am a retired fire investigator with over 33 years-experience in the suppression, investigation, and fighting of all types of fires. During that time, I have filled different roles in these areas as an employee of the California Department of Forestry and Fire Protection (Cal Fire), including arson and bomb investigator, fire suppression captain, fire apparatus engineer, and fire fighter.

I am an educator in the field of fire investigation and currently teach a class in Wildland Fire Origin and Cause Determination to multiple fire-fighting organizations. I hold several certificates and have completed countless training hours in the areas of fire prevention, control, and investigation. My experience and training has provided me with an understanding of the sources of fire ignition and the behavior of electrical equipment and its potential role in fire ignition.

I have been asked to review the proposed AT&T Macro Wireless Telecommunications Facility at 350 Amber Drive in San Francisco, CA. A monopole is proposed for to be installed near a San Francisco Police Academy building. I have been asked to review the proposed Facility in light of the opponents' allegations of supported fire and related risks.

The proposed tower sits on the southern side of the selected property. The tower will be placed in a small grove of eucalyptus trees, approximately 100 feet south of the San Francisco Police Academy building. Northeast of the site is an asphalt parking lot. A proposed 12' wide access road is shown east of the tower and wraps around to the north of the existing parking area. The George Christopher Playground and Diamond Heights Baseball Field are located to the east and south of the proposed site. Visible in Google

Earth satellite photos are walking trails with stairs going from the baseball field towards the labelled Islais Creek Trail. South and west of the site is an area that contains various types of grasses, brush and trees. Approximately 300 feet west of the site is Turquoise Way. This area is known as Glen Canyon Park.

Wildland fire concerns are very low in the Diamond Heights area due to several conditions. The proposed site is located within 4 miles of the Pacific Ocean and San Francisco Bay, and very high humidity in the area. The geography of Diamond Heights invites frequent fog to the area, based on the interaction of San Francisco's traditional marine layer and the neighborhood's exposed hilltop setting near Twin Peaks and Mount Davidson, which funnels, lifts, and cools moist ocean air arriving from the west. The neighborhood's elevation and exposure place it directly in the path of the funneled marine layer and westerly winds, so it runs cooler, windier, and foggier than many other San Francisco neighborhoods. Though San Francisco overall is not a fire friendly climate, the area of Diamond Heights tends to be foggier and windier than other areas of the City.

I have reviewed the submission of Susan Foster on behalf of the opponents of AT&T's cell tower installation. Ms. Foster offers many unsubstantiated and speculative assertions regarding alleged fire risk associated with the tower, some of which I discuss below. In particular, she attempts to offer cautionary examples of wildfires caused by downed or damaged power lines in Southern California in particularly hot and dry conditions, and fierce Santa Ana winds – conditions that simply do not exist in San Francisco.

The San Francisco area has a different climate and weather than Southern California. San Francisco averages 24 inches of rainfall per year while Los Angeles averages 15 inches per year. San Francisco Area does not get Santa Ana or El Diablo winds. Those winds are exceptionally strong easterly winds coming from the high elevation desert that blow downhill and are warmed up and sped up as they blow. San Francisco is surrounded on three sides by water which aids in the nighttime humidity recovery and

greatly reduces any possible wildland fire threat. Nor do the trees in the area of the proposed tower present any fire risk. As set out in a January 28, 2026, Arborist Report on the Facility, '[t]here is no tree-related fire risk associated with the vegetation at this site. The site is located within a gap in the tree canopies and has a flat non-flammable asphalt surface. The trees are not a threat to the infrastructure nor is the infrastructure a threat to the trees."

Ms. Foster states that macro cell towers "pose a fire risk," and that "these fires are covered up by the telecommunications industry," yet she offers no examples or evidence for this accusation. By law, local fire departments are required to complete an initial origin and cause reports for fires in their jurisdiction to which they are called to respond. The allegation that these fires are "covered up" by local fire departments is wholly unsupported by Ms. Foster, which is consistent with the conspiracy-based approach reflected in most of the assertions in her letter.

Cell towers are not known to randomly catch fire. The proposed AT&T tower and associated equipment will be constructed of noncombustible materials. The associated powerlines and communication lines will be enclosed within the metal structure. Cell towers require electricity to function. The power lines supplying the site will be underground. Wildland fires usually occur due to branches falling onto power lines, or power lines making contact with other nearby facilities. There are no exposed power lines associated with the proposed tower, however.

The National Fire Protection Association (NFPA) has a standard for telecommunications facilities, NFPA 76 – Standard for the Fire Protection of Telecommunications Facilities. This prevention guideline was created to minimize fires in telecommunication facilities. The proposed facility will comply with these standards, which mandates the storage of any combustible materials in approved non-combustible containers near or around the facility.

Most cell towers utilize a source of backup power in the event of a power failure. This site will have a diesel generator incorporated into its design. The positioning of diesel generators, as in this case, is regulated by accepted building standards.

I do not believe the location at 350 Amber Drive of this proposed tower presents a fire risk. The site's secure location, rigid engineering standards, compliance with NFPA Standards, the higher humidity in the area, and the absence of any exposed power lines near the proposed tower all reduce any potential fire threat.

I have reviewed the California Public Utility Commission (CPUC) Report on the 2007 Malibu Fire, which indicates that fire started when 3 wooden poles fell in 85-100 mph winds on a dry hot day in Malibu Canyon, causing a 12,000-volt Edison power line to contact dry grass, sparking a fire. There was no cell tower or wireless telephone equipment involved in that fire.

Based on the published Woolsey Fire (2018) Investigation Report, that fire started when a loose Edison guy wire came loose in 70 mph winds and contacted a 16,000-volt Edison power line. Moreover, no cell tower or wireless telephone equipment was involved in that fire. Neither of the other fires that Foster mentions (Guejito, Silverado) were caused by or in any way involved a cell tower. Power lines, loose wires, high winds and nearby receptive vegetation were the contributing factors in those fires' ignition, both of which occurred in conditions that do not exist in San Francisco, involving equipment that does not resemble the planned tower.

Ms. Foster claims that if there is a fire on a cell tower (which is by itself a rare event, and one for which Ms. Foster cannot give one example of, save for a football light tower fire that was <u>not</u> blamed on a nearby cell antenna), it would supposedly be difficult to combat such a fire, since the power "from the grid" will take time to shut off. Power provided to a macro cell tower, like all commercial power, is stepped down by transformers and regulated to the end user. There are also fuses and breakers built into the system. In the possible event of a fault (arc), the involved fuse or breaker will turn off the power to that

phase (power line). The grid at large is not affected. As an example, in a structure fire, firefighters can fight the fire after securing the utilities, power and gas to that structure; they do not need to shut off the power "on the grid," or to the larger area.

Thomas W. Oldag

Thomas W. Oldag

THOMAS W. OLDAG

CURRICULUM VITAE

RETIRED FIRE INVESTIGATOR

Currently instruct yearly wildland fire investigation (Wildland Fire Origin and Cause Determination FI-210) classes.

DUTIES WHILE EMPLOYED

Investigate fires of accidental, suspicious, and incendiary origin and instruct various fire investigation classes.

POLICE / FIRE EMPLOYMENT HISTORY

California Department of Forestry and Fire Protection – Office of the State Fire Marshal April 2015 to October 2015 – Senior Arson Bomb Investigator

California Department of Forestry and Fire Protection, November 2000 to 2015
Fire Captain - Fire Investigator

Lake County Sheriff's Department June 1994 to June 1998
Level II Reserve Deputy Sheriff

Lake County Sheriff's Search and Rescue, January 1990 to May 1996.
Team K9 Team Leader

California Department of Forestry and Fire Protection, May 1994 to November 2000
Fire Suppression Captain

California Department of Forestry and Fire Protection, August 1987 to May 1994
Fire Apparatus Engineer

California Department of Forestry and Fire Protection, August 1982 to August 1986
Seasonal Fire Fighter

INVESTIGATIVE EXPERIENCE	# OF SCENES	ACCIDENTAL	ARSON	Undet.
Structure Fires	79	38	32	9
Mobile Homes	13	10	2	1
Vehicle Fires	98	24	67	7
Wildland Fires	1274	921	304	49
Totals	1464	993	405	66

While assigned to a fire engine, I have been involved in the suppression of approximately 1700 fires and assisted in approximately 700 fire investigations.

FORMAL EDUCATION

American River College, Cosumnes River College, Ukiah College, Santa Rosa Jr. College – obtained over 95 college units.

VOCATIONAL CERTIFICATES

Firefighter I - California State Board of Fire Service - 1988
Basic POST Academy, Sacramento Sheriff's Academy – 2001 – 707 hours
Basic POST Certificate – 2002

VOCATIONAL TRAINING AND EDUCATION

Basic Fire Control / Fire Apparatus Engineer CDF Academy – 1988 – 360 hours
Arson / Bomb Investigation 1A, State Fire Marshal – 1988 – 40 hours
Hazardous Material Materials Recognition, State Fire Marshal – 1990 – 24 hours
Arson / Bomb Investigation 1B, State Fire Marshal – 1992 – 40 hours
Intermediate Fire Behavior – USFS – 1995 – 40 hours
Serial Arsonist Analysis and Planning, State Fire Marshal – 1998 – 40 hours
Arson / Bomb Investigation 2A, State Fire Marshal – 1999 – 40 hours
Prop 115 Class – Sacramento Sheriff's Academy - 2001
FEMA Juvenile Firesetters Prevention & Intervention Workshop – 2001 – 16 hours
Forest Practice Enforcement Course – 2002 – 32 hours
Interview and Interrogation Class – Interview and Interrogation Institute – 2003 – 24 hours
Fire Scene Death Investigations – State Fire Marshal – 2003 – 16 hours
Arson – Explosives Foundation Specialty Course, Robert Presley Institute of Criminal Investigation's – 2003 – 40 hours
Arson / Bomb Investigation 2B, State Fire Marshal – 2003 – 40 hours
Post Blast Explosive Class, Alcohol Tobacco and Firearms – 2003 – 40 hours
Electrical Fire Investigation – CCAI – 2003 – 6 hours
Statutes and Regulations Class, Title 19, State Fire Marshal – 2004 – 24 hours
CCAI Conference – 2005 – 40 hours
NFPA 921 Class – CCAI – 2005 – 8 hours
Wildland Fire Origin and Cause Determination FI-210 – USFS – 2005 – 40 hours
Public Display Fireworks Training – CSFM – 2005 – 6 hours
Vehicle Fire Investigation – Live Fire Training – CCAI – 2005 – 8 hours
CDF Type III Fire Investigator - 2006
Wildland Fire Case Development Course FI-310 – USFS – 2006 – 40 hours
CDF Type II Fire Investigator – 2007
Forensic Fire Death Investigation – San Luis Obispo CA – CCAI – 2009 – 40 hours
NFPA 921 Class – CCAI / Fire Cause Analysis – 2009 – 8 hours
Wildland Fire Civil Case Development Course FI-311 – 2011 – 40 Hours
Post Flashover Fire Investigation – 2011 – 8 hours
Wildland Fire Investigation Team Member – 2011

I have deliberately set approximately 550 fires in various wildland fuel types, construction type (wood framed, cement block, metal siding) buildings, and vehicles to observe fire spread and behavior. The fires duplicated accidental and incendiary fires. Many of the fires were used for fire suppression training.

I have instructed fire fighters in classes on Fire Suppression and Basic Fire Investigation, Origin and Cause. I taught thirteen Wildland Fire Origin and Cause Determination FI-210 Classes, seventeen Wildland Fire Origin and Cause Determination FI-110 Classes, and assisted at the 2010 - 2015 Forensic Fire Death Investigation Class in San Luis Obispo CA. Since retiring I have continued to teach FI-210 Classes.

I have attended thirteen seminars, eight to thirty-two hours in length sponsored by the California Conference of Arson Investigators. In 2012, I taught a three-hour block on serial arson at the Fall California Conference of Arson Investigators in San Luis Obispo. In 2012, I taught at an Arson for Prosecutor's Class in El Dorado County. In 2013, I taught a two-hour block at a Serial Arson Conference in Las Vegas. November 2014, I taught a two-and-a-half-day course on wildland fire investigation at the California Conference of Arson Investigators.

In 2022, I co-wrote a chapter in the book, The Path of Flames – Understanding and Responding to Fatal Wildfires.

I have testified six times in El Dorado County as an expert witness. Three times during the Preliminary Hearings for arson cases, once to the Grand Jury involving a homicide case and once during a homicide trail:

2001 – El Dorado County Superior - Juvenile Court – Arson Case – Sentencing
2007 – El Dorado County Superior Court – Cunha Arson Case – Preliminary Hearing
2008 – El Dorado County Superior Court – McFarland Arson Case – Preliminary Hearing
2009 – El Dorado County Grand Jury – Presba Murder / Arson Case – Grand Jury
2011 – El Dorado County Superior Court – Tyler / Whit Murder Case – Jury Trial
2013 – El Dorado County Superior Court – Dobbs Arson Case – Jury Trial

I testified once in El Dorado County in a non fire related murder trial in 2009 – Mt. Aukum Shooting.

I have testified once as an expert witness in Amador County:

2004 – Amador County Superior Court – Juvenile Court – Arson Case - Sentencing

I testified once in Amador County in a non fire related pursuit and resisting trial in 2006.

While employed by CAL FIRE, I was a member from 2001of the Sacramento – Sierra Arson Task Force and the El Dorado County Arson Task Force.

In addition to fire related cases, I have also been involved in investigating fraud, theft, conspiracy, narcotics, burglary, forgery, forest practice issues and vehicle code violations to name a few.

Deposition and Civil Court:
Giovannotto Land and Cattle, LLC, A California Corporation v. Elliot French, and individual; and DOES 1-50, – Case No.: 20CV372857 – Superior Court of the State of California County of Santa Clara

12/2024

Exhibit F

Exhibit F

Tree Management Experts

Consulting Arborists

3109 Sacramento Street
San Francisco, CA 94115

Member, American Society of Consulting Arborists
Certified Arborists, Tree Risk Assessment Qualified

NextEdge Networks
Attn: Ben Foust, Senior Program Manager
via email: ben.foust@nextedgenetworks.com

RE: AT&T Site Number CCL05350
AT&T Site Name: SF Police Academy

Date: 1/28/26

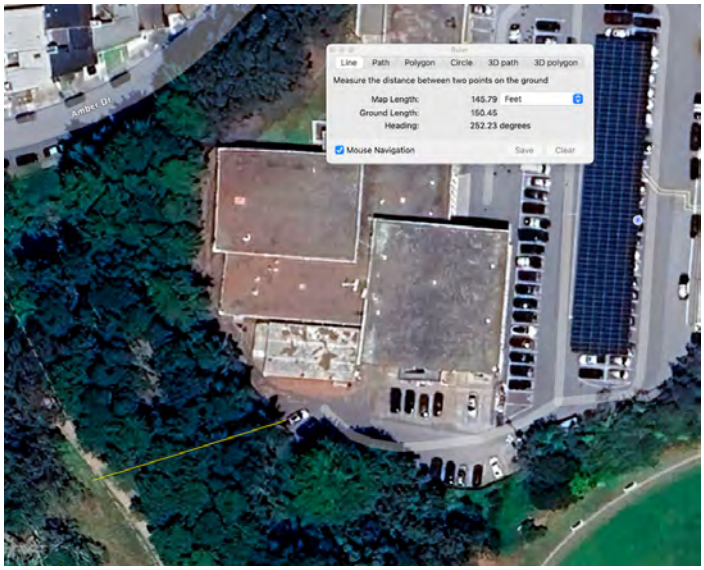
ARBORIST REPORT

Assignment and Summary

On 1/20/26, Certified Arborist Roy Leggitt provide a site visit to inspect trees that are adjacent to the construction site and within a distance that would likely have roots present. Trees and vegetation on the adjacent park property and at the south corner of the SF Police Academy site were inspected, photographed and characterized. Plans dated 11/18/25 were provided and considered during the assessment. Construction impacts that might put any tree at a risk of harm, and risk mitigation that could benefit the trees was considered. In addition, consideration was given to any fire risk issues, as related to trees. As discussed in detail below, anticipated root impacts are negligible and there is not tree-related fire risk associated with the vegetation at the site.

Trees Adjacent to Site

There are 6 trees adjacent to the site that are Monterey cypress (*Hesperocyparis macrocarpa*). Of these trees, only one is close enough potentially be impacted by construction. The tree is 25 feet away from construction, measures 47.4” diameter and is in fair condition.



There is no impact to an “Mixed Exotic Oak Woodland” since there are no oaks anywhere near this project. The nearest oak is 145 feet away (as shown at right), is a small tree, and is the other side of a park pathway and retaining wall. All trees closer than this are exotic species not native to San Francisco ecosystems and include Tasmanian blue gum eucalyptus, Monterey cypress and Monterey pine. These trees would be correctly referred to as “Mixed Exotic Species”, and

there is no “Oak Woodland” present. The “Mixed Exotic Species” in the adjacent park will not be affected by construction.

Root Zones and Potential Construction Impacts

Structural roots (a subset of the entire root system discussed above) are close to the trunk and hold the tree up. Other roots, typically further out, absorb water and nutrients, but given the pavement there is little water available and therefore less root growth in such an area. The more distant roots are likely far fewer and far less important than those on the park side of the tree. There will be no impacts to structural roots since the proposed AT&T non-exclusive parking space already exists and will not change existing conditions for the tree.

The root zone of the subject tree likely extends throughout the construction area, although root development is severely limited by the existing concrete curbing and asphalt surface. Under ideal conditions, the root zone could extend to a radius in feet of 10 times the trunk diameter inches, and therefore creating a circle that is 474 inches radius, or 39.5 feet.

The root zone is expected to have developed preferentially in the park and much less so where it is covered by pavement. The reduced root development due to the pavement is predictive that the root system will be less than half as extensive and reaching less than 20 feet radius. The entire lease area is about 550 square feet, and the bult portion of the lease area is less than half of that area. The percent root loss is under 5 percent, even with a fully developed root zone. Given the limited development of a root zone beneath pavement, it is likely that 2 to 3 percent of the root zone could be affected. This is a negligible amount of root loss and does not pose any threat to the tree.

The utility trench is located within the road/driveway portion of the existing parking lot and is far from this tree and any other tree. It is anticipated that few if any roots are present at that distance.

Best Practices

- Anticipated root impacts are negligible.
- A Project Arborist from Tree Management Experts shall be on site during all demolition and excavation work.
- Saw cut asphalt in discreet locations as shown on plans for placement of the pier, structures, generator pad and utility trench.
- Retain adjacent asphalt to protect soil and any potential roots.
- Any roots encountered will be cleanly cut with a sharp tool.

Tree-Related Fire Risk

There is no tree-related fire risk associated with the vegetation at this site. The site is located within a gap in the tree canopies, and has a flat non-flammable asphalt surface. The trees are not a threat to the infrastructure nor is the infrastructure a threat to the trees.

Tree Management Experts

Consulting Arborists

3109 Sacramento Street
San Francisco, CA 94115

Member, American Society of Consulting Arborists
Certified Arborists, Tree Risk Assessment Qualified

Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Title and ownership of all property considered are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes or other governmental regulations.
3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible. The consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
4. Various diagrams, sketches and photographs in this report are intended as visual aids and are not to scale, unless specifically stated as such on the drawing. These communication tools in no way substitute for nor should be construed as surveys, architectural or engineering drawings.
5. Loss or alteration of any part of this report invalidates the entire report.
6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior written or verbal consent of the consultant.
7. This report is intended to be conveyed to the City and County of San Francisco and will be part of the Public record. Such limitations apply to the original report, a copy, facsimile, scanned image or digital version thereof.
8. This report represents the opinion of the consultant. In no way is the consultant's fee contingent upon a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
9. The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule, an agreement or a contract.
10. Information contained in this report reflects observations made only to those items described and only reflects the condition of those items at the time of the site visit. Furthermore, the inspection is limited to visual examination of items and elements at the site, unless expressly stated otherwise. There is no expressed or implied warranty or guarantee that problems or deficiencies of the plants or property inspected may not arise in the future.

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Disclosure Statement

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. An arborist cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate the trees.

Tree risk assessment is not tree risk management. The arborist typically has the distinct and separate role of being the tree risk assessor. The tree risk manager is typically the property owner or the agent thereof. Tree risk management should consider tree risk assessment, and may consider many additional factors related to property management decision making.

Tree Management Experts

Consulting Arborists

3109 Sacramento Street
San Francisco, CA 94115

Member, American Society of Consulting Arborists
Certified Arborists, Tree Risk Assessment Qualified

Certification of Performance

I, Roy C. Leggitt, III, Certify:

- That we have inspected the trees and/or property evaluated in this report. We have stated findings accurately, insofar as the limitations of the Assignment and within the extent and context identified by this report;
- That we have no current or prospective interest in the vegetation or any real estate that is the subject of this report, and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are original and are based on current scientific procedures and facts and according to commonly accepted arboricultural practices;
- That no significant professional assistance was provided, except as indicated by the inclusion of another professional report or professional attribution within this report;
- That compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I am a member in good standing of the American Society of Consulting Arborists, and of the International Society of Arboriculture.

I am a Certified Arborist and am Tree Risk Assessment Qualified (TRAQ), as designated by the International Society of Arboriculture.

I maintain a California State Contractor's License for Tree Service (C-61, D-49).

I have attained professional training in all areas of knowledge asserted through this report by completion of a Bachelor of Science degree in Plant Science, by routinely attending pertinent professional conferences and by reading current research from professional journals, books and other media.

I have rendered professional services in a full-time capacity in the field of horticulture and arboriculture for more than 38 years.

Signed: Roy C. Leggitt, III

Certified Arborist WE-0564A

Date: *1/2826*

roy@treemanagementexperts.com
Cell (415) 606-3610












Cypress, Pine
and Eucalyptus
Oaks and
Willows

Exhibit G

Exhibit G

AT&T Wireless

CCL05350 SF Police Academy
350 Amber Drive, San Francisco, CA
Photosims Produced on 1-23-2026



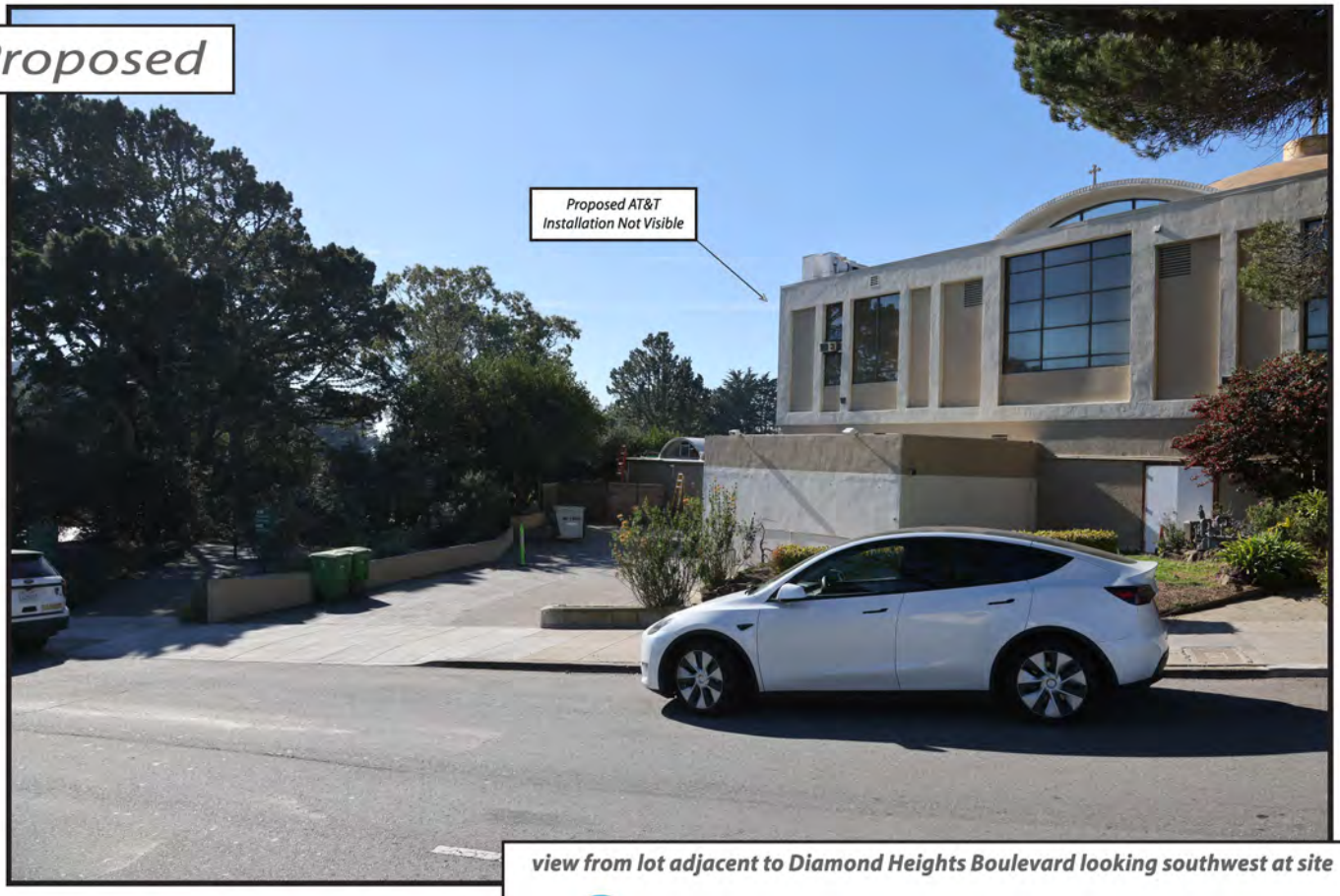
AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

Shot Point Map

Existing



Proposed



view from lot adjacent to Diamond Heights Boulevard looking southwest at site

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

AT&T Wireless

CCL05350 SF Police Academy
350 Amber Drive, San Francisco, CA
Photosims Produced on 1-23-2026

Existing



Proposed



view from Duncan Street looking southwest at site

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

AT&T Wireless

CCL05350 SF Police Academy
350 Amber Drive, San Francisco, CA
Photosims Produced on 1-23-2026

Existing



Proposed



view from Duncan Street looking southwest at site

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

AT&T Wireless

CCL05350 SF Police Academy
350 Amber Drive, San Francisco, CA
Photosims Produced on 1-23-2026

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; "timwolfred@aol.com"; "dhcasf@gmail.com"; "lentzplanning@gmail.com"; "cb720d@att.com"; "cammy.blackstone@att.com"; "cdrivdahl@mlandlaw.com"
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	PLANNING DEPT REVISED RESPONSE: Hearing - Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project - December 9, 2025
Date:	Tuesday, December 9, 2025 9:00:42 AM
Attachments:	image001.png

Greetings,

The Office of the Clerk of the Board is in receipt of a revised response the Planning Department, for the Special Order before the Board of Supervisors on **December 9, 2025**, at 3:00 p.m. for the appeal of Conditional Use Authorization for the proposed project at 350 Amber Drive. The document was received after the compilation of, and is not included in, the hearing's agenda packet for the December 9, 2025 Board meeting, but included as part of the official file.

Please find the following link to the document for the matter:

Planning Department Response - December 8, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251098

Best regards,

Jocelyn Wong
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T: 415.554.7702 | F: 415.554.5163
jocelyn.wong@sfgov.org | www.sfbos.org

(VIRTUAL APPOINTMENTS) To schedule a "virtual" meeting with me (on Microsoft Teams), please ask and I can answer your questions in real time.

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San Francisco Planning

49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
628.652.7600
www.sfplanning.org

CONDITIONAL USE AUTHORIZATION APPEAL

350 AMBER DR – CUA Appeal (Revised)

Date:	December 8, 2025
To:	Angela Calvillo, Clerk of the Board of Supervisors
From:	Sarah Dennis-Phillips, Planning Director – Planning Department (628) 652-7600 John Dacey, Case Planner – Planning Department (628) 652-7415
Re:	**Board File No. 25108, Planning Case No. 2024-004318APL** **Appeal of Conditional Use Authorization for 350 Amber Drive**
Hearing Date:	December 9, 2025
Project Sponsor:	AT&T Wireless c/o Eric Lentz, (805) 895-4394
Appellants:	Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association

Introduction

This memorandum and the attached documents are a response to the letters of appeal to the Board of Supervisors ("Board") regarding the Planning Commission's ("Commission") approval of the application for Conditional Use Authorization under Planning Department Case Number 2024-004318CUA pursuant to Planning Code Sections 211.2 (Public District), and 303 (Conditional Use Authorization) for a project located at 350 Amber Drive.

This memorandum addresses the appeal to the Board, filed on October 27, 2025, by Mitchell M. Tsai of the Mitchell M. Tsai Law Firm, representing a local community group (Diamond Heights Community Association).

The decision before the Board is whether to uphold, overturn, or amend the Planning Commission's approval of an application for Conditional Use Authorization to allow the proposed project at the subject property.

Site Description & Present Use

The project site is located at 350 Amber Drive (Assessor's Block 7251, Lot 005), with frontage along Amber Drive to the northwest, Turquoise Way to west and Duncan Street to the north. The property is owned by the City and County of San Francisco and under the jurisdiction of the San Francisco Police Department (SFPD), with a lot area of approximately 195,113 square feet (about 4.5 acres). The project site contains three, one-to-two-story buildings, and is currently occupied and used by SFPD as its police academy. The buildings are surrounded by paved surface parking.

Surrounding Properties and Neighborhood

The project site is located within the P (Public) Zoning District in the Diamond Heights neighborhood. The immediate context is mixed in character with residential, recreation, and institutional uses. The immediate neighborhood includes two-to-three-story residential development to the west and north, a public park (Glen Canyon Park) to the southwest, St. Nicholas Orthodox Church to the northeast, and another public park (George Christopher Playground) to the south and east.

Project Description

The proposed project would construct a new AT&T Macro Wireless Telecommunications Services Facility on a new approximately 104-foot-tall monopole located at the rear of the San Francisco Police Academy, over a paved parking area with a footprint of approximately 550 square feet. The new facility would consist of twelve new antennas, nine remote radio units, three tower-mounted-surge suppressors, one global positioning systems unit mounted on a proposed outdoor equipment cabinet, one walk-up cabinet, and one 30-kilowatt direct current backup generator with a 190-gallon diesel fuel tank on a concrete pad. The ancillary equipment would be surrounded by an eight-foot-tall chain link fence.

Background

- On May 9, 2024, Eric Lentz, on behalf of AT&T Wireless (hereinafter "Project Sponsor") filed Application No. 2024-004318CUA (hereinafter "Application") with the Planning Department (hereinafter "Department") for a Conditional Use Authorization for the project.

- On May 29, 2025, the project was determined to be exempt from the California Environmental Quality Act ("CEQA") as a Class 3 Categorical Exemption under CEQA as described in the determination contained in the Planning Department files for this project.

- On September 25, 2025, the Commission conducted a duly noted public hearing at a regularly scheduled meeting and voted 4-3 to approve the project by granting a Conditional Use Authorization, under Motion 21825.[1] The Commission required conditions of approval.

[1] https://citypln-m-extnl.sfgov.org/External/link.ashx?Action=Download&ObjectVersion=-1&vault={A4A7DACD-B0DC-4322-BD29F6F07103C6E0}&objectGUID={FCAEB256-AC76-40F4-84DE-0BB6F84356F3}&fileGUID={A0C8B36E-05B3-4965-95BF-B67F7CD09952}

- On October 27, 2025, Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association (appellant), filed an appeal of both the Conditional Use Authorization and the Categorical Exemption determination for the project.
- On November 3, 2025, the Department determined the CEQA appeal was timely filed.
- On November 6, 2025, the Clerk of the Board initially determined the signatures submitted for the appeal of the Conditional Use Authorization did not meet the required threshold of 20%, with only 16.92% of the required area represented.
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Conditional Use Authorization Requirements

Planning Code Section 303 establishes criteria for the Commission to consider when reviewing all applications for Conditional Use approval. To approve the project, the Commission must find that these criteria have been met:

1. That the proposed use or feature, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable for, and compatible with, the neighborhood or the community; and
2. That such use or feature as proposed will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity, or injurious to property, improvements or potential development in the vicinity, with respect to aspects including but not limited to the following:
    a. The nature of the proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;
    b. The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading;
    c. The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;
    d. Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs; and
3. That such use or feature as proposed will comply with the applicable provisions of this Code and will not adversely affect the General Plan.

4. That such use or feature as proposed will provide development that is in conformity with the stated purpose of the applicable Use District.

Appellant Issues and Planning Department Responses

ISSUE 1: The appellant is concerned about the safety of the proposed project in light of its location, given its location in a landslide zone and atop an infill site.

RESPONSE 1:
The Appellant has not provided any supportive evidence that the geology and soils present at the project site pose a safety risk. Thus, the following analysis of geology and soils is provided for information purposes only.

To address potential adverse effects related to geology and soils, San Francisco relies on state and local regulations. Building permits are reviewed and approved under the California Building Code and the San Francisco Building Code. The local code includes state requirements plus city-specific amendments and administrative bulletins. The building department also issues information sheets with implementation procedures. Following these codes and procedures helps ensure the safety of all new construction in the city.

The project site is not in a seismic hazard zone for landslides. Rather, it is located approximately 50 feet from an area that is deemed a seismic hazard zone for landslides. During the building department's review of the building permit, the building department will review the project construction plans for conformance with the building code. The building department may require a geotechnical or other additional site-specific report(s) through the building permit review process and its implementing procedures, as needed. The building department's review of the building permit application pursuant to its implementation of the building code will ensure that the proposed project is not detrimental to the safety of persons in the vicinity.

ISSUE 2: Appellant asserts that the applicant misrepresented the Project to the Commission, by providing plans lacking accurate location information and intends to construct a 104-foot-tall monopine, a tower camouflaged as a pine tree with artificial branches and leaves, which must be assessed for potential environmental impacts.

RESPONSE 2: The plans reviewed and approved by the Commission, dated February 6, 2024 and stamped "Exhibit B" under Motion 21825, omitted latitude and longitude coordinates and area calculations for the project site, and contained a typo on sheets A-4 and A-5, labeling the monopole as a "monopine". However, the design and location were accurately depicted in the site plan, illustrated elevations and described in the presentation to the Commission. The Motion and all references to the design are for a monopole design, and the applicant has stated that they intend to proceed with the simple monopole design. A monopine design was presented at the September 25, 2025 Commission meeting only to demonstrate an alternative design that was considered in the preparation of the application but was ultimately found to be less favorable by the Commission. To obtain Department

approval, the proposed 104-foot monopole design must conform to the plans and project description approved by the Planning Commission in its September 25, 2025 motion.

ISSUE 3: Potential safety issues from the wireless facility as a potential fire hazard, based on its proximity to Glen Canyon Park.

RESPONSE 3: The Appellant raises concerns about fire risks and hazards from the monopole and the associated fuel tank given its proximity to the nearby parks and surrounding wooded area. No evidence has been provided that the proposed project poses a risk to residents and visitors in the vicinity as a fire hazard. Thus, the following discussion of the project's impacts related to fires is provided for informational purposes only.

San Francisco is not located in a wildfire hazard zone, as shown in the Fire Hazard Severity Zones map, which is mapped by Cal Fire, as mandated by California Public Resources Code sections 4201-4204.[2] The proposed project would be required to meet the state and local fire codes, which include specific requirements for cellular antenna sites and placement of diesel generators.[3] These code requirements are intended to ensure fire and life safety, fire prevention, and property protection.

In addition, the project site is less than a mile from two SFFD stations, approximately 0.7 miles away from Fire Station 26 at 80 Digby Street and 0.8 miles away from Fire Station 24 at 100 Hoffman Avenue. Further, the City's fire division will conduct a compliance review as part of the building permit application process.

ISSUE 4: Potential project impacts on wildlife species and wildlife corridors at Glen Canyon Park.

RESPONSE 4: The project site is located adjacent to the Christopher Diamond Softball Field and Glen Canyon Park. The San Francisco Recreation and Parks Department published a Significant Natural Resource Area Management Plan in 2006.[4] The plan included a detailed assessment of Glen Canyon Park, including sensitive species that are found within the natural area boundary.[5] The assessment reveals that the natural area boundary is not coterminous with the boundaries of the park, but rather is approximately 200 feet away from the project site. The portion of the natural area that is closest to the project site is also designated as Management Area 3, which is the least sensitive type of habitat, found to be covered with urban forest and invasive grasslands. Therefore, the Recreation and Parks Department's assessment found that while the interior portions of the adjacent park support sensitive species that natural area boundary is not near the project site and could not be reasonably affected by construction or operation of the proposed project.

Because the proposed project is not located directly adjacent to a natural area, that the nearest natural area is of the least sensitive status and that the project site would be entirely fenced in, the project would not result in any significant impacts related to biological resources.

[2] https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones
[3] https://sf-fire.org/206-submittal-requirements-cellular-antenna-sites
[4] https://sfrecpark.org/1402/Natural-Resource-Management-Plan
[5] https://sfrecpark.org/DocumentCenter/View/8522/63OShaughnesy_GlenPark

ISSUE 5: Potential impacts on St Nicholas Orthodox Church, which appellant describes as a potential historic resource.

RESPONSE 5: Contrary to appellant's argument, St. Nicholas Orthodox Church has not been identified as a potential historic resource and there are no identified historical resources in the project's vicinity. Moreover, the project is located approximately 500 feet away from the Church. The Appellant has not provided any evidence that the installation of a wireless telecommunications services facility under these circumstances would result in a substantial adverse change to the significance of a historic resource.

ISSUE 6: Appellant asserts that the Planning Commission's findings of General Plan consistency are unsupported, as they leave out inconsistencies with the open space preservation and public health and safety policies under the General Plan and its Open Space and Safety Elements.

RESPONSE 6: The appellant asserts that specific policies within the General Plan are inconsistent with the approval of the proposed project. In their letter, they contend that the project is inconsistent and incompatible with Policy 1.10 and Policy 1.3 of the Recreation and Open Space Elements. They also assert the project is inconsistent with Goal 3 of the City's Safety and Resilience Element and that the approval of the project is incompatible with Policy 3.2.4 of the same Element due to the geological conditions of the project location.

Policy 1.10 of the Recreation and Open Space Element is to "*Ensure that open space is safe and secure for the City's entire population.*"[6] The appellant's letter states that improving AT&T's coverage and capacity within the playground and park and in the neighborhood does not address safety and security for the City's surrounding population. While the examples listed under this policy are mostly regarding the physical design of open space, improved cellular coverage would allow for better utilization of the parks, as more residents would have access to emergency services, and feel safer while utilizing the parks for recreation. It would further reduce the fear of crime, as an increase in park visitors would encourage more "eyes on the park".

Policy 1.3 of the Recreation and Open Space Element is to "*Preserve existing open space by restricting its conversion to other uses and limiting encroachment from other uses, assuring no loss of quantity or quality of open space*." Under this policy the General Plan states "*Outdoor space in parks and playgrounds should not be diminished except in very unique cases. Yet, despite general agreement on the need to preserve public open space, developments may indeed be proposed on public land designated as open space. It is anticipated that the most persuasive arguments in favor of development will be based on the "public value" of the proposed development. The public value will differ among proposals, and a determination of this projected value as compared the potential open space benefit will be difficult and must be subject to rigorous public scrutiny.*

The proposed project is in an existing parking lot located at the rear of the San Francisco Police Academy and is not readily accessible to the public. It is not located on Recreation and Park Department Land and is not identified as existing or proposed open space in the General Plan as shown in *Map 3: Existing and*

[6] https://generalplan.sfplanning.org/I3_Recreation_and_Open_Space.htm

Proposed Open Space.[7] A Shadow Analysis was prepared by Fastcast and reviewed at the June 9, 2025 hearing of the Recreation and Park Commission , who adopted a resolution to the Planning Commission confirming that the net new shadow cast by the proposed project will not have a significant adverse impact on the use of George Christopher Playground and Glen Canyon Park. Because the project allows for greater utilization of the existing adjacent open space at both nearby parks by providing improved cellular coverage in case of emergency and does not lead to the loss of any quantity or quality in their open space, the project remains compatible and consistent with the Recreation and Open Space Element.

The appeal states that the Planning Commissions limited their focus to the disaster management policies in the Safety and Resilience Element, rather than focusing on Goal 3, Hazard Mitigation and the objectives and policies within this section on reducing the likelihood, scale and severity of impacts from all disasters. Appellant further claims that the project will directly cause fire or natural disasters and question the benefits of wireless service to the general public. The project's location outside of a wildfire hazard zone, and the existing local and state building regulations, would result in a low risk of fire or other risk of disaster. On the contrary, Policy 5.1.3 of the Safety and Resilience Element specifically states that private communication systems, including AT&T, are critical facilities in the City's communication system and redundant networks will help ensure that incidental failures do not have grave impacts.[8]

Policy 3.2.4 is to "*ensure foundations and structural systems are designed with consideration of site soils conditions when reviewing projects in areas subject to liquefaction, slope instability, sea level rise, groundwater rise, and other flood hazards.*" As mentioned in the response to Issue 1, the building permit application will be reviewed against state and local codes for any potential adverse effects related to geology and soils. Following these codes and procedures helps ensure the safety of all new construction in the city.

Summary Response

The Appellant claims that the project would result in significant health and safety impacts based upon seismic, landslide, fire and chemical hazards to the public, and to the environmentally sensitive resources in Glen Canyon Park. They also claim that the project is incompatible with the General Plan goals, objectives and policies. No substantive evidence has been provided to support these claims or indicating that the Commission erred in their approval of the Conditional Use Authorization. Furthermore, the conditions of approval under Motion 21825 will address any potential impacts of the proposed project.

Conclusion

For the reasons stated in this document, Planning Commission Motion 21825, and in the Planning Department case file, the Planning Department recommends that the Board uphold the Planning Commission's decision in approving the Conditional Use Authorization.

[7] https://generalplan.sfplanning.org/images/I3.recreation_openspace/ROS_Map3.pdf
[8] https://generalplan.sfplanning.org/I8_Safety_and_Resilience.htm

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; "timwolfred@aol.com"; "dhcasf@gmail.com"; "lentzplanning@gmail.com"; "cb720d@att.com"; "cammy.blackstone@att.com"; "cdrivdahl@mlandlaw.com"
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	PLANNING DEPT RESPONSE: Hearing - Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project - December 9, 2025
Date:	Friday, December 5, 2025 4:53:06 PM
Attachments:	image001.png

Greetings,

The Office of the Clerk of the Board is in receipt of a response the Planning Department, for the Special Order before the Board of Supervisors on **December 9, 2025**, at 3:00 p.m. for the appeal of Conditional Use Authorization for the proposed project at 350 Amber Drive. The documents were received after the compilation of, and is not included in, the hearing's agenda packet for the December 9, 2025 Board meeting, but included as part of the official file.

Please find the following link to the document for the matter:

Planning Department Response - December 5, 2025

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Best regards,

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CONDITIONAL USE AUTHORIZATION APPEAL

350 AMBER DR – CUA Appeal

Date:	December 5, 2025
To:	Angela Calvillo, Clerk of the Board of Supervisors
From:	Sarah Dennis-Phillips, Planning Director – Planning Department (628) 652-7600 John Dacey, Case Planner – Planning Department (628) 652-7415
Re:	**Board File No. 25108, Planning Case No. 2024-004318APL** **Appeal of Conditional Use Authorization for 350 Amber Drive**
Hearing Date:	December 9, 2025
Project Sponsor:	AT&T Wireless c/o Eric Lentz, (805) 895-4394
Appellants:	Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association

Introduction

This memorandum and the attached documents are a response to the letters of appeal to the Board of Supervisors ("Board") regarding the Planning Commission's ("Commission") approval of the application for Conditional Use Authorization under Planning Department Case Number 2024-004318CUA pursuant to Planning Code Sections 211.2 (Public District), and 303 (Conditional Use Authorization) for a project located at 350 Amber Drive.

This memorandum addresses the appeal to the Board, filed on October 27, 2025, by Mitchell M. Tsai of the Mitchell M. Tsai Law Firm, representing a local community group (Diamond Heights Community Association).

The decision before the Board is whether to uphold, overturn, or amend the Planning Commission's approval of an application for Conditional Use Authorization to allow the proposed project at the subject property.

Site Description & Present Use

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Background

- On May 9, 2024, Eric Lentz, on behalf of AT&T Wireless (hereinafter "Project Sponsor") filed Application No. 2024-004318CUA (hereinafter "Application") with the Planning Department (hereinafter "Department") for a Conditional Use Authorization for the project.

- On May 29, 2025, the project was determined to be exempt from the California Environmental Quality Act ("CEQA") as a Class 3 Categorical Exemption under CEQA as described in the determination contained in the Planning Department files for this project.

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RESPONSE 1:
The Appellant has not provided any supportive evidence that the geology and soils present at the project site pose a safety risk. Thus, the following analysis of geology and soils is provided for information purposes only.

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The project site is not in a seismic hazard zone for landslides. Rather, it is located approximately 50 feet from an area that is deemed a seismic hazard zone for landslides. During the building department's review of the building permit, the building department will review the project construction plans for conformance with the building code. The building department may require a geotechnical or other additional site-specific report(s) through the building permit review process and its implementing procedures, as needed. The building department's review of the building permit application pursuant to its implementation of the building code would ensure that the proposed project is not detrimental to the safety of persons in the vicinity.

ISSUE 2: The applicant misrepresented the Project to the Commission, by providing plans lacking accurate location information and intends to construct a 104-foot-tall monopine, a tower camouflaged as a pine tree with artificial branches and leaves, which must be assessed for potential environmental impacts.

RESPONSE 2: The plans reviewed and approved by the Commission, dated February 6, 2024 and stamped "Exhibit B" under Motion 21825 omitted latitude and longitude coordinates and area calculations for the project site, and contained a typo on sheets A-4 and A-5, labeling the monopole as a "monopine". However, the design and location were accurately depicted in the site plan, illustrated elevations and described in the presentation to the Commission. The Motion and all references to the design are for a monopole design, and the applicant has stated that they intend to proceed with the simple monopole design. A monopine design was presented at the September 25, 2025 Commission meeting only to demonstrate an alternative design that was considered in the preparation of the application but was ultimately found to be less favorable by the Commission. To obtain Department

approval, the proposed 104-foot monopole design must conform to the plans and project description approved by the Planning Commission in its September 25, 2025 motion.

ISSUE 3: The proposed wireless facility presents a safety issue as a potential fire hazard, given its proximity to Glen Canyon Park.

RESPONSE 3: The Appellant raises concerns about fire risks and hazards from the monopole and the associated fuel tank given its proximity to the nearby parks and surrounding wooded area. No evidence has been provided that the proposed project poses a risk to residents and visitors in the vicinity as a fire hazard. Thus, the following discussion of the project's impacts related to fires is provided for informational purposes only.

San Francisco is not located in a wildfire hazard zone, as shown in the Fire Hazard Severity Zones map, which is mapped by Cal Fire, per mandates under the California Public Resources Code sections 4201-4204.[2] The proposed project would be required to meet the state and local fire codes, which include specific requirements for cellular antenna sites and placement of diesel generators.[3] These code requirements are intended to ensure fire and life safety, fire prevention, and property protection.

In addition, the project site is less than a mile from two SFFD stations, approximately 0.7 miles away from Fire Station 26 at 80 Digby Street and 0.8 miles away from Fire Station 24 at 100 Hoffman Avenue. Further, the City's fire division will conduct a compliance review as part of the building permit application process.

ISSUE 4: The project will impact wildlife species and wildlife corridors at Glen Canyon Park.

RESPONSE 4: The project site is located adjacent to the Christopher Diamond Softball Field and Glen Canyon Park. The San Francisco Recreation and Parks Department published a Significant Natural Resource Area Management Plan in 2006.[4] The plan included a detailed assessment of Glen Canyon Park, including sensitive species that are found with the natural area boundary.[5] However, in the assessment, the natural area boundary is not coterminous with the boundaries of the park, but rather is approximately 200 feet away from the project site. The portion of the natural area that is closest to the project site is also designated as Management Area 3, which is the least sensitive type of habitat, found to be covered with urban forest and invasive grasslands. Therefore, the Recreation and Parks Department's assessment found that the interior portions of the adjacent park support sensitive species; however, the natural area boundary is not near the project site and could not be reasonably affected by construction or operation of the proposed project.

Given that the proposed project is not located directly adjacent to a natural area, that the nearest natural area is of the least sensitive status and that the project site would be entirely fenced in, the project would not result in any significant impacts related to biological resources.

[2] https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones
[3] https://sf-fire.org/206-submittal-requirements-cellular-antenna-sites
[4] https://sfrecpark.org/1402/Natural-Resource-Management-Plan
[5] https://sfrecpark.org/DocumentCenter/View/8522/63OShaughnesy_GlenPark

ISSUE 5: The project will have an impact St Nicholas Orthodox Church, a potential historic resource.

RESPONSE 5: St. Nicholas Orthodox Church has not been identified as a potential historic resource and there are no identified historical resources in the project's vicinity. The project is located approximately 500 feet away from the church. The Appellant has not provided any evidence that the installation of a wireless telecommunications services facility would result in a substantial adverse change to the significance of a historic resource.

ISSUE 6: The Planning Commission's findings of General Plan consistency are unsupported, as they leave out inconsistencies with the open space preservation and public health and safety policies under the General Plan and its Open Space and Safety Elements.

RESPONSE 6: The appellant asserts that specific policies within the General Plan are inconsistent with the approval of the proposed project. In their letter they contend that the project is inconsistent and incompatible with Policy 1.10 and Policy 1.3 of the Recreation and Open Space Elements. In their letter they also assert the project is inconsistent with Goal 3 of the City's Safety and Resilience Element and that the approval of the project is incompatible with Policy 3.2.4 of the same Element due to the geological conditions of the location.

Policy 1.10 of the Recreation and Open Space Element is to "*Ensure that open space is safe and secure for the City's entire population.*"[6] The appellant's letter states that improving AT&T's coverage and capacity within the playground and park and in the neighborhood does not address the safety and security for the City's surrounding population. While the examples listed under this policy are mostly regarding the physical design of open space, improved cellular coverage would allow for better utilization of the parks, allowing for an increase in park visitors and encourage more "eyes on the park".

Policy 1.3 of the Recreation and Open Space Element is to "*Preserve existing open space by restricting its conversion to other uses and limiting encroachment from other uses, assuring no loss of quantity or quality of open space*." Under this policy it states "*Outdoor space in parks and playgrounds should not be diminished except in very unique cases. Yet, despite general agreement on the need to preserve public open space, developments may indeed be proposed on public land designated as open space. It is anticipated that the most persuasive arguments in favor of development will be based on the "public value" of the proposed development. The public value will differ among proposals, and a determination of this projected value as compared the potential open space benefit will be difficult and must be subject to rigorous public scrutiny.*

The proposed project is in an existing parking lot at the rear of the San Francisco Police Academy and is not readily accessible to the public. It is not located on Recreation and Park Department Land and is not identified as existing or proposed open space in the General Plan as shown in *Map 3: Existing and Proposed Open Space.*[7] A Shadow Analysis was prepared by Fastcast and reviewed by the Recreation and Park Commission on June 9, 2025, who adopted a resolution recommending to the Planning Commission that the net new shadow cast by the proposed project will not have a significant adverse impact on the

[6] https://generalplan.sfplanning.org/I3_Recreation_and_Open_Space.htm
[7] https://generalplan.sfplanning.org/images/I3.recreation_openspace/ROS_Map3.pdf

use of George Christopher Playground and Glen Canyon Park. Given that the project allows for greater utilization of the existing adjacent open space at both nearby parks and does not lead to the loss of any quantity or quality in their open space, the project remains compatible and consistent with the Recreation and Open Space Element.

The Appellant's letter states that Commission's limited their focus to the disaster management policies in the Safety and Resilience Element, rather than focusing on Goal 3, Hazard Mitigation and the objectives and policies within this section on reducing the likelihood, scale and severity of impacts from all disasters. The letter includes the claim that the project will directly cause any fire or natural disasters and questions the benefits of wireless service to the general public. The claims of disaster risk are low given the project's location outside of a wildfire hazard zone, and the existing local and state building regulations. Policy 5.1.3 of the Safety and Resilience Element specifically mentions private communication systems, including AT&T, are critical facilities in the City's communication system and redundant networks will help ensure that incidental failures do not have grave impacts.[8]

Policy 3.2.4 is to "e*nsure foundations and structural systems are designed with consideration of site soils conditions when reviewing projects in areas subject to liquefaction, slope instability, sea level rise, groundwater rise, and other flood hazards."* As mentioned in the response to Issue 1, the building permit application will be reviewed against state and local regulations codes for any potential adverse effects related to geology and soils. Following these codes and procedures helps ensure the safety of all new construction in the city.

Summary Response

The Appellant claims that the project would result in significant health and safety impacts based upon seismic, landslide, fire and chemical hazards to the public, and to the environmentally sensitive resources in Glen Canyon Park. They also claim that the project is incompatible with the General Plan goals, objectives and policies. No substantive evidence has been provided indicating the Commission erred in their approval of the Conditional Use Authorization. Furthermore, the conditions of approval under Motion 21825 will address any potential impacts of the proposed project.

Conclusion

For the reasons stated in this document, Planning Commission Motion 21825, and in the Planning Department case file, the Planning Department recommends that the Board uphold the Planning Commission's decision in approving the Conditional Use Authorization.

[8] https://generalplan.sfplanning.org/I8_Safety_and_Resilience.htm

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; "timwolfred@aol.com"; "dhcasf@gmail.com"; "lentzplanning@gmail.com"; "cb720d@att.com"; "cammy.blackstone@att.com"; "cdrivdahl@mlandlaw.com"
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	APPELLANT CORRESPONDENCE AND PROJECT SPONSOR RESPONSE: Hearing - Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project - December 9, 2025
Date:	Wednesday, December 3, 2025 2:12:34 PM

Greetings,

The Office of the Clerk of the Board is in receipt of correspondence from the appellant, Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association, and a response from Carlyn Drivdahl of Monchamp Meldrum LLP, on behalf of the project sponsor AT&T, for the Special Order before the Board of Supervisors on **December 9, 2025**, at 3:00 p.m. for the appeal of Conditional Use Authorization for the proposed project at 350 Amber Drive.

Please find the following link to the document for the matter:

Appellant Correspondence - December 3, 2025
Project Sponsor Response - December 3, 2025
Public Correspondence

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251098

Regards,

Arthur Khoo
Office of the Clerk of the Board
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
(415) 554-4447 | (415) 554-5163
arthur.khoo@sfgov.org | www.sfbos.org

Disclosures: *Personal information that is provided in communications to the Board of Supervisors is subject to disclosure under the California Public Records Act and the San Francisco Sunshine Ordinance. Personal information provided will not be redacted. Members of the public are not required to provide personal identifying information when they communicate with the Board of Supervisors and its committees. All written or oral communications that*

members of the public submit to the Clerk's Office regarding pending legislation or hearings will be made available to all members of the public for inspection and copying. The Clerk's Office does not redact any information from these submissions. This means that personal information—including names, phone numbers, addresses and similar information that a member of the public elects to submit to the Board and its committees—may appear on the Board of Supervisors website or in other public documents that members of the public may inspect or copy.

MONCHAMP MELDRUM LLP

To: San Francisco Board of Supervisors
From: Monchamp Meldrum LLP
Date: December 3, 2025
RE: File No. 251098 – Appeal of Conditional Use Authorization Approval
Proposed 350 Amber Drive Project (Case No. 2024-0004318CUA)

Our firm represents the applicant, AT&T Wireless (AT&T), in relation to the appeal by the Diamond Heights Community Association (DHCA) of the Conditional Use Authorization (CUA) Approval for the above-referenced project at 350 Amber Drive in San Francisco (Project). AT&T's opposition to the CUA appeal is set out below.

I. INTRODUCTION

On September 25, 2025, the San Francisco (City) Planning Commission (Commission) approved a CUA and Shadow Findings for construction of an AT&T telecommunications facility at 350 Amber Drive, San Francisco. That approval included the determination that the Project qualified for a CEQA Class 3 Exemption. DHCA appealed the CUA approval and the CEQA Category 3 Exemption to the Board of Supervisors (Board).[1]

DHCA challenges the CUA approval based on the following generalized concerns: (1) soil stability in a mapped landslide zone, (2) environmental impacts associated with a monopine, (3) fire hazards, (4) effects to Glen Canyon Park, St. Nicholas Antiochian Orthodox Church, the George Christopher Playground and Noe Valley Preschool, (5) General Plan inconsistency, and (6) zoning and height inconsistencies. DHCA also incorporates other comments raised regarding the Project. As set forth herein, there is substantial evidence supporting the Commission's CUA and Shadow Findings for the Project. DHCA provides only speculation and unsupported hyperbole. The CUA appeal has no merit and should be denied.

II. THE PROJECT

AT&T seeks to install, use, and maintain a new 104-foot wireless telecommunications facility monopole at the rear of the San Francisco Police Academy at 350 Amber Drive. The Project will include twelve (12) new antennas, nine (9) new remote radio units, three (3) tower mounted

[1] AT&T has submitted a separate memorandum in response to DHCA's appeal of the CEQA Exemption Determination. This memorandum only addresses DHCA's CUA appeal. Both DHCA and AT&T have requested a continuance of the scheduled December 9, 2025, hearing. AT&T reserves the right to submit additional documentation supporting the CUA approval and CEQA determination prior to the continued hearing.

DC-9 surge suppressors, one (1) GPS unit mounted on proposed outdoor equipment cabinet, one (1) walk-up cabinet, and one (1) 30kw DC generator with a 150-gallon diesel fuel tank on a concrete pad (see Attachment A).[2] The ancillary equipment will be surrounded by an 8' chain link fence. In total, the Project will cover a small ground footprint of approximately 550 square feet.

The Project will address an existing service coverage gap in the AT&T wireless network caused by inadequate wireless infrastructure in the area bordered by the intersection of Amber Drive and Turquoise Way, O'Shaughnessy Blvd to the south and west, and Diamond Heights Blvd to the east. This area of poor service coverage includes numerous homes, businesses in the Diamond Heights Shopping Center, well-traveled roads, Glen Canyon Park, St. Nicholas Antiochian Orthodox Church and other nearby locations. The Project will also provide critical service on the FirstNet network, which is a special band of dedicated wireless service for first responders during potential emergencies.

III. APPROVAL OF THE PROJECT COMPORTS WITH FEDERAL LAW

The federal Telecommunications Act of 1996, 47 U.S.C. § 332 (TCA) provides important rights to wireless service providers and establishes key limitations upon state and local zoning authorities when considering applications for permits to construct personal wireless service facilities. The United States Supreme Court has explained that the TCA was enacted in part to prioritize and streamline deployment of wireless technologies on a national basis.[3] In enacting the TCA, Congress intended "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services . . . by opening all telecommunications markets to competition."[4]

Rapid deployment of wireless telecommunications facilities like the instant Project is an important national issue, especially because Americans are increasingly eliminating their traditional landline telephone in favor of wireless devices. Based on a two-decade study, the Center for Disease Control and Prevention (CDC) has determined that more than 91% of California adults, and more than 98% of Californians under age 18, rely exclusively or primarily

[2] The tank was originally shown as 190-gallons, but the plans were later updated to reflect the current standard 150-gallon diesel fuel tank. Attachment A also removes and replaces the remnant references to the Project as a "monopine." The Project is a monopole.

[3] *City of Rancho Palos Verdes v. Abrams*, 544 U.S. 113, 115-16 (2005) ("Congress enacted the Telecommunications Act of 1996 (TCA), 110 Stat. 56, to promote competition and higher quality in American telecommunications services and to 'encourage the rapid deployment of new telecommunications technologies.' Ibid. One of the means by which it sought to accomplish these goals was reduction of the impediments imposed by local governments upon the installation of facilities for wireless communications, such as antenna towers.").

[4] H.R. Conf. Rep. No. 104-458, at 113 (1996), reprinted in 1996 U.S.C.C.A.N at 124.

on wireless communications in their homes.[5] California has also reported to the Federal Communications Commission (FCC) that there were more than 23.3 million wireless calls and 98,065 texts to 911 in 2023 (the most recent year for state level data).[6]

IV. STANDARD OF REVIEW

A. The Board Must Review the Appeal for Substantial Evidence.

The TCA defines the appropriate scope of the City's overall review of AT&T's CUA application. Under the TCA, the City's review must be based on substantial evidence in the written record.[7] The "substantial evidence" requirement means the City's decision must be "authorized by applicable local regulations and supported by a reasonable amount of evidence."[8] A zoning decision on a wireless facility that is not based on applicable local regulations, is invalid.[9] Moreover, "[s]ubstantial evidence must be substantiated."[10] "A local government 'is not free to prescribe what inferences from the evidence it will accept and reject, but must draw all those inferences that the evidence fairly demands.'"[11] In other words, to deny a permit, a local government must have specific reasons that are both consistent with the applicable regulations and supported by substantial evidence in the record.

B. Radio Frequency (RF) Emissions Cannot Be Considered Here.

The TCA specifically precludes local governments from considering any alleged effects of radio frequency emissions in making decisions regarding wireless telecommunications facilities "to the extent such facilities comply with the [Federal Communication] Commission's regulations concerning such emissions."[12] Here, there is no dispute that the Project will operate below applicable FCC limits. An engineering analysis of the Project's RF Emissions was prepared by Hammett & Edison, Consulting Engineers and was certified by a California Registered Professional Engineer. The report confirms the Project will operate well within (and actually far below) all

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[5] *See* CDC Wireless Substitution: State-Level Estimates from the National Health Interview Survey, https://www.cdc.gov/nchs/data/nhis/earlyrelease/Wireless_state_202506.pdf.

[6] *See* FCC's Sixteenth Annual 911 Fee Report, https://www.fcc.gov/sites/default/files/16th-Annual-911FeeReport-2024.pdf.

[7] 47 U.S.C. § 332(c)(7)(B)(iii).

[8] *MetroPCS, Inc. v. City & Cnty. of San Francisco*, 400 F.3d 715, 725 (9th Cir. 2005).

[9] *T-Mobile USA, Inc. v. City of Anacortes*, 572 F.3d 987, 993 (9th Cir. 2009), *citing MetroPCS, Inc*., 400 F.3d at 724.

[10] *T-Mobile Cent., LLC v. Charter Twp. Of W. Bloomfield*, 691 F.3d 794, 800 (6th Cir. 2012).

[11] *T-Mobile USA, Inc. v. City of Anacortes*, 2008 U.S. Dist. LEXIS 116764 (W.D.Wa. July 18, 2008), at *8 (*aff'd* 572 F.3d 987), citing *Penobscot Air Servs., Ltd. v. FAA*, 164 F.3d 713, 718 (1st Cir.1999).

[12] 47 U.S.C. § 332(c)(7)(B)(iv).

applicable FCC exposure limits. Given this compliance with FCC standards, AT&T's application cannot be rejected based on concerns about RF emissions.

C. The City Must Avoid Effectively Prohibiting Wireless Services.

To meet the important national goal of fostering robust and competitive wireless services, the TCA preempts state and local governments from taking actions (including zoning decisions) that prohibit or effectively prohibit personal wireless services.[13] Even if the Board was to identify a code-based reason to disfavor the Project, the City is preempted from prohibiting or effectively prohibiting wireless service. An effective prohibition occurs whenever a siting authority denies an application to construct a wireless communications facility despite the wireless provider's showing that it has a need to provide and improve wireless services in a specific area, and that it has taken steps to ensure the proposed facility best meets the siting authority's applicable regulations.[14] Here, AT&T has demonstrated, by industry-standard methods, including engineering coverage maps, that it has a significant gap in service coverage. AT&T's network service needs and its proposed solution have been verified by independent engineers, including confirmation of service levels and an industry-standard drive test. AT&T also worked hard to make sure the Project is the least intrusive means to close this coverage gap, including by conducting a comprehensive alternative sites analysis and working with City Staff on facility design. Neither AT&T nor the City has identified any other available, feasible, and less intrusive alternative. Based on this, the City's denial of the Project would amount to an effective prohibition and a violation of federal law.

[13] 47 U.S.C. § 332(c)(7)(B)(i)(II).

[14] See *MetroPCS, Inc.*, 400 F.3d at 730-35 (adopting least intrusive means test for effective prohibition); *City of Anacortes*, 572 F.3d at 995-99 (held once wireless provider demonstrates a significant gap and that its solution is least intrusive, burden shifts to local government to identify an available, feasible, and less intrusive alternative); *In the Matter of California Payphone Association Petition for Preemption, Etc.,* Opinion and Order, FCC 97-251, 12 FCC Rcd 14191 (July 17, 1997) (adopting material inhibition test); *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment,* Declaratory Ruling and Third Report and Order, FCC 18-133 (September 27, 2018) ("Infrastructure Order") at ¶¶ 35-37, n.95.

V. ARGUMENT

A. The Planning Commission's CUA and Shadow Findings Are Supported by Substantial Evidence.

Under San Francisco Municipal Code (SFMC) section 303(c), the Planning Commission must approve an application and authorize a Conditional Use if the facts presented are such to establish that:

1. The proposed use or feature, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable for, and compatible with, the neighborhood or the community.[15]

2. Such use or feature as proposed will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity, or injurious to property, improvements or potential development in the vicinity, with respect to aspects including but not limited to the following:

    a. The nature of the proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

    b. The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading and of proposed alternatives to off-street parking, including provisions of car-share parking spaces, as defined in Section 166 of this Code.

    c. The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;

    d. Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs; and

3. Such use or feature as proposed will comply with the applicable provisions of this Code and will not adversely affect the General Plan; and

4. Such use or feature as proposed will provide development that is in conformity with the stated purpose of the applicable Use District.[16]

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[15] Project does not exceed the Non-Residential Use Size limitations for the P-OS zoning district. Therefore, related findings are omitted.

[16] SFMC § 303(c)(5) references additional criteria specific to the use. Subsection (s) applies to wireless telecommunication services facilities but does not have additional criteria, only limiting CUAs for a duration of 10 years.

The September 25, 2025, City Planning Staff Report for the Project clearly lays out the substantial evidence supporting the Commission's CUA approval.

B. The Project Site is Not in a Mapped Landslide Zone

DHCA alleges the Project site is in a mapped earthquake-induced landslide zone. According to the California Geologic Survey, the southwestern portion of the Police Academy parcel is within a landslide zone, but the Project site itself is outside this delineation as shown in the figure below.[17] The City similarly maps the landslide zone on the southwestern portion of the Police Academy parcel, outside the Project site boundary.[18]



DHCA's alleged landslide zone argument is without merit and should be disregarded in the Board's evaluation of the Project.

C. The Project Site is Stable.

DHCA makes the unsupported assertion that "infill . . . suggests soil instability" and concludes (again without evidence) that just disturbing the soil in construction might affect the neighborhood and its groundwaters. Evaluation of geologic conditions is a technical subject, and lay opinion unsupported by an adequate factual foundation does not constitute substantial evidence. As explained in the attached letter from SALEM Engineering Group, Inc. (SALEM), Engineering Geologist Dean Ledgerwood (CEG #2613) visited the Police Academy property, including the Project site and adjacent slope, and observed no visible evidence of previous slope movement/landslides (see Attachment B). Further, SALEM reviewed a 1999 Geotechnical Investigation Report for the parcel and concluded "documented distress to the existing buildings

[17] https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/.
[18] https://data.sfgov.org/-/San-Francisco-Seismic-Hazard-Zones/7ahv-68ap.

has been attributed to settlement of the underlying fill soils and was not caused by slope instability." SALEM further concluded:

> The planned tower is anticipated to be supported using a CIDH pile foundation. Cellular tower monopole foundation loads are generally considered to be light to moderate. The cellular tower vertical loads supported on CIDH pile foundations would evenly distribute the load stresses and therefore, would not be anticipated to impart significant increased stresses to the existing fills. Thus, the tower structure would not be anticipated to result in an increased potential for additional static settlements to occur outside the tower lease area.
>
> Construction of the proposed tower improvements would not be anticipated to increase surface water drainage over or into the existing western slope area. Also, the tower construction would not result in a potential for increased saturation of the fills.

Development on fill is common in the City and other developed areas and construction methods and materials are specifically and reliably designed to accommodate construction on fill. DHCA does not have the technical expertise to opine regarding soil stability, seismic safety, or construction techniques. DHCA's speculation in its appeal letter does not constitute substantial evidence and cannot be used to contradict expert opinion.

D. The Project Is a Monopole, Not a Monopine.

The DHCA appeal letter suggests AT&T has somehow misled the City regarding the tower's appearance. DHCA appears to be referencing previous references to the Project as a "monopine" in earlier plans submitted to the City. As proposed by AT&T and analyzed by the City, the Project is a monopole. The Project plans have been corrected. AT&T disagrees with DHCA's arguments regarding the use of disguising materials, but such arguments are irrelevant here, in any case.

E. Neither the Project Nor the Project Site Is a Significant Fire Hazard.

Without any supporting (let alone substantial) evidence, the DHCA appeal letter alleges that "wireless facilities similar to the Project are a significant fire hazard and have caused fires in multiple areas in California." DHCA also alleges the eucalyptus trees bordering the Project site are themselves a fire hazard. Contrary to DHCA's assertions, it is not "highly foreseeable" that there would be a "spark, electrical failure, or fire" on the Project site. According to the Wireless Infrastructure Association, there were 142,100 cell towers (defined as free-standing structures

over 50 feet in height) in the United States in 2022.[19] The ignition of cell towers is not a frequent or expected occurrence. DHCA does not have the technical expertise to opine regarding the likelihood the Project would catch fire and the speculation in its appeal letter does not constitute substantial evidence.

The City Fire Department would be actively involved in the building permit process for the Project, confirming fire safety compliance for the tower and generator (i.e., emergency shutoff procedures and signage, alarms, spill containment, exhaust location, double walled piping, etc.). Further, the Project will be designed in accordance with APCO/ANSI 2.106.1-2019 public safety grade site hardening requirements developed by the American National Standards Institute and the Association of Public Safety Communications Officials. This is a voluntary standard that lays out site-hardening requirements—such as power, redundancy, physical security, and environmental resilience—needed to make wireless communications facilities "public safety grade." It's intended as a comprehensive best-practice guide for public-safety network builders to ensure mission-critical sites remain robust and available during disasters or other adverse conditions. The Project will fill a critical need should a disaster strike, not cause one.

F. The Project Will Not Impact Glen Canyon Park.

Without providing any specific details, DHCA generally alleges the Project would impact Glen Canyon Park. The 2006 Significant Natural Resource Areas Management Plan (SNRAM Plan) identifies 60 acres of Glen Canyon Park as a "Significant Natural Area." Each Natural Area was broken down into 3 types of Management Areas, which represent differing levels of sensitivity, species presence, and habitat complexity as follows:[20]

- MA-1 – most sensitive to human-generated disturbance. Areas support listed or special-status species, support habitat for significant number of sensitive species, contain relatively high portion of native plants or plant richness, etc.

- MA-2 – comparatively more resilient to human disturbance than MA-1 and buffer zone between MA-1 and MA-3. Areas include important habitats, remnant native vegetation of otherwise widespread plant communities, habitat for local native wildlife species, etc.

- MA-3 – least sensitive to human-generated disturbance and buffer zone for MA-1 and MA-2 from surrounding developed recreational and other land uses. Areas include predominance of non-native vegetation, absence of sensitive species but support complement of some native plants and wildlife habitat, etc.

[19] https://www.benton.org/headlines/us-cell-towers-and-small-cells-numbers#:~:text=The%20Wireless%20Infrastructure%20Association%20(WIA,at%20the%20end%20of%202022.
[20] SNRAM Plan, pp. 1-4 through 1-6.

According to Figure 6.3-5 of the SNRAM Plan, the Police Academy site is adjacent to an MA-3 area of Glen Canyon Park, an area designated as least sensitive to human-generated disturbance. An MA-3 area is not an environmental resource of critical concern. The Project site is approximately 150 feet away from this MA-3 area of Glen Canyon Park. The Project will not interfere with any of the Glen Canyon Park site improvements, vegetation management, or wildlife recommendations in the SNRAM Plan. Neither will the Project impact the utilization of the Glen Canyon Park for recreation purposes. To the extent DHCA alleges RF emissions could impact wildlife, as discussed above in Section III.B, the TCA prohibits regulation "on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [FCC]'s regulations concerning such emissions."[21] DHCA provides no substantial evidence supporting its contentions that the Project would impact Glen Canyon Park or the wildlife or plant species located therein.

G. The Project Does Not Impact the St. Nicholas Antiochian Orthodox Church.

The DHCA appeal letter suggests that the St. Nicholas Antiochian Orthodox Church (Church), located at 5200 Diamond Heights Boulevard, is a historic resource that would be impacted by the Project. The Church was built in 1965. The Church is not listed on the National Register of Historic Places or the California Register of Historic Resources. It is not a designated City Landmark or listed on an adopted local historic register. Under the City's CEQA Review Procedures for Historic Resources,[22] the Church is Category B as it is age-eligible for further consultation and review.

Even if the Church were considered a historic resource (though there is no substantial evidence that it is), the Project does not impact the Church. The Police Academy parcel is southwest of the Church (see Figure below), and the Project is located in the southwestern portion of the Police Academy parcel, behind one- and two-story buildings. In the Project's photosimulations (Exhibit F to the 9/25/25 Planning Commission staff report), Shot Point 4 at the intersection of Amber Drive and Duncan Street is closer to the Project site than the Church (but at a similar elevation).

[21] 47 U.S.C. § 332(c)(7)(B)(iv).
[22] https://sfplanning.org/sites/default/files/documents/preserv/bulletins/HistPres_Bulletin_16.PDF



As shown in the figure below, the Project will have minimal visual impact at Shot Point 4, and because the Church is further away, it will not have a significant visual impact on the Church. As such, the Project would not cause a substantial adverse change in the significance of the Church.



H. The Project Does Not Impact the George Christopher Playground or Noe Valley Preschool.

Without providing any detail, DHCA alleges the Project would impact the George Christopher Playground and Noe Valley Preschool. The Project site is approximately 200 feet from center field of the baseball field and 350 feet from the playground and preschool. As discussed throughout this memorandum, the Project would not affect soil stability or increase fire hazards. Further, with implementation of the FirstNet network in the area, public safety will be increased by the Project.

I. The Project Is Consistent with the City's General Plan.

In determining a project's consistency with its own general plan, the City has broad discretion in interpreting General Plan policies and the extent to which the project conforms with those policies.[23] A project need not be an "exact match" with a general plan; "state law does not require precise conformity," but only requires the project be "compatible with the objectives, policies, general land uses, and programs" of the general plan.[24] No project could completely satisfy every policy in a general plan and state law does not impose such a requirement.[25]

The DHCA appeal letter suggests the Project is inconsistent with open space preservation and public health and safety policies under the Open Space and Safety Elements of the City's General Plan. The DHCA letter does not specifically allege which policies are inconsistent nor allege any failing with the findings made in the City's September 25, 2025, Planning staff report. As such, DHCA has offered no actual contradiction to the City's interpretation, which must be afforded great deference.

J. The Project Complies with the City's Zoning and Height Restrictions.

Also without providing any detail, DHCA alleges the Project violates the City's zoning and height restrictions. As explained in the September 25, 2025, Planning staff report, however, the Project fully complies with the use and height restrictions for the P-OS zoning district.

K. Issues Raised In Other Comment Letters.

The DHCA appeal letter purports to incorporate "all the comments and concerns raised to date on the Project." To that end, this section responds to the "Memorandum in Opposition" (Memorandum) submitted for the Commission's September 25, 2025, hearing. The Memorandum argues six points: (1) Project would violate applicable local laws; (2) Project would

[23] *Anderson First Coal. v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1192 (*Anderson*).
[24] *San Franciscans Upholding the Downtown Plan v. City & County of San Francisco* (2002) 102 Cal.App.4th 656, 678, quotation omitted.
[25] *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 719.

have detrimental aesthetic impacts and decrease property value; (3) Project could increase height without further zoning approval; (4) Need for Project has not been established; (5) Geological concerns; and (6) Denial requires written decision and litigation risk is minimal. As discussed below, these points are without merit.

1. Project Complies with Local Laws

As discussed in Sections IV.I and IV.J above, the Project is consistent with the City's General Plan and complies with the zoning regulations.

2. Project Would Not Have Detrimental Aesthetic Effects or Decrease Property Values

Generalized Aesthetic Concerns. The Memorandum alleges problems with AT&T's photosimulations and visual impact analysis due to the photos being taken from public vantage points instead of neighboring homes. The Memorandum further overstates and inappropriately relies on a 2005 federal Second Circuit decision, *Omnipoint Communications Inc. v. The City of White Plains*, 430 F.3d 529, to assert the neighbors' private views are substantial evidence to support a denial. At issue is whether there is substantial evidence to make the CUA findings set forth in SFMC section 303(c) (and discussed above in Section V.A), not whether the Project may impact private views under New York law as in *Omnipoint*. The CUA findings do not require a finding regarding the impact on private view corridors. AT&T identified the Police Academy property as the City's top preference location for siting – this is a Preference 1 Site under the City's *Wireless Telecommunications Services Facilities Siting Guidelines*. And unlike the *Omnipoint* tower (which was 3 times the height of the nearest trees), the Project is designed to provide the needed wireless coverage with the least visual impact, only 10-20 feet higher than the surrounding trees.

The Memorandum includes general concerns about the aesthetic impact of the Project. These concerns claim the Project will detract from the beauty of the area and create a displeasing aesthetic. But these generalized concerns cannot be considered substantial evidence to support denying the Project.[26] As set out below, the comments included are hardly substantial and offer no specific complaints about the Proposed Tower itself.[27]

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[26] *See, e.g., California RSA No. 4 v. Madera County*, 332 F.Supp.2d 1291, 1308-09 (E.D. Cal. 2003) (generalized expressions of concern regarding aesthetics fail to meet the substantial evidence threshold under the Act) (citing *Omnipoint Corp. v. Zoning Hearing Bd.*, 181 F.3d 403, 409 (3d Cir.1999); *Cellular Telephone Co. v. Town of Oyster Bay*, 166 F.3d 490 (2nd Cir. 1999)).

[27] *Id*.; *see also Charter Twp. of W. Bloomfield*, 691 F.3d at 800 ("[w]hile concerns brought before the Board certainly relate to building a wireless facility that is aesthetically pleasing and 'harmonious with the surrounding area,' the evidence in the record is hardly substantial. The generalized complaints effectively amount to NIMBY –

Concerns About Impacts to Property Values. The Memorandum speculates that construction of the Project will have an adverse impact on property values in the area. But these concerns are supported only by generalized statements and irrelevant studies and arise from legally inappropriate and misplaced fears about RF emissions.

In support of the Memorandum, some realtors claim property values will drop, but most of these comments are again based on misplaced health concerns, and none offer any supporting data or case studies. Courts within the Ninth Circuit and elsewhere have long agreed that general concerns about property values or aesthetics do not constitute substantial evidence to support denial of a permit to install a wireless telecommunications facility.[28]

The articles and reports relied on by the Memorandum are also not helpful here. For example, the Memorandum relies on an article from New Jersey that concerned a site-specific analysis, which was itself sharply criticized for relying on data about much taller towers (including a 450-foot-tall lattice tower).

The Memorandum also cites studies by Sandy Bond and her colleagues, which were primarily conducted in New Zealand in the 1990s, and then followed up in the Eastern U.S. in the 2000s. Those studies found some instances when property values decreased near cell towers and other instances when property values ***increased*** by up to 12% after a nearby cell tower was constructed.[29] In fact, the authors specifically explained that their results were based largely on survey respondents' inappropriate perceptions of health effects from cell towers.[30] The authors also concluded that any effects on property values "generally diminished with distance from the tower."[31] And these studies carefully noted that their results are location specific and ***should not be generalized to other locations***.[32] In other words, even the authors of this cited study do not endorse applying them to this situation. The studies have no bearing here – they concern cell towers placed within residential neighborhoods in New Zealand and Florida rather than the

not in my backyard . . . [g]eneral concerns from a few residents that the tower would be ugly or that a resident would not want it in his backyard are not sufficient.").

[28] *See, e.g., California RSA No. 4*, 332 F.Supp.2d at 1308-09 (generalized expressions of concern regarding the effect on property values or aesthetics fail to meet the substantial evidence threshold under the Act) (citing *Omnipoint Corp. v. Zoning Hearing Bd.*, 181 F.3d 403, 409 (3d Cir.1999); *Town of Oyster Bay*, 166 F.3d 490).

[29] Bond & Wang, *The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods*, The Appraisal Journal, Summer 2005, at 269 (explaining the increase in property values was likely due to the lack of concern over possible health effects). In the same report, the authors also found another instance where there was an increase, albeit statistically insignificant (0.4%) increase, in property values after construction of a cell tower. *See id*. at 270.

[30] *See id*.

[31] *See* Bond, The Effect of Distance to Cell Phone Towers on House Prices in Florida, The Appraisal Journal, Fall 2007.

[32] *See id*. at 271 ("caution must be used in making generalizations from this study or applying the results directly to other similar studies or valuation assignments").

Project, which will be sited on public property hundreds of feet from nearby homes and screened by existing mature trees.

The Memorandum suggests homes could become "wholly unsaleable" if wireless facilities are built in the vicinity with a footnote to Federal Housing Administration (FHA) loans and federal Housing and Urban Development Reference Guide. The Guide cited has been archived since 2012[33] and is not part of current FHA regulations. Further, the cited provisions reference high-voltage transmission lines and radio/TV transmission towers, and do not address wireless facilities. In the current FHA Single Family Housing Policy Handbook, appraisers evaluate proximity to overhead electric power transmission and local distribution lines and towers, not wireless facilities.[34] The Memorandum's footnote also references a 2012 Dallas-area news article, but this article is not available for review.

Under the TCA, these sources cannot be the basis to deny AT&T's CUA application. Far from substantial evidence, these are generalized concerns propped up by inapplicable findings which themselves do not support the Memorandum's claims about property values. Further, AT&T's Project cannot be rejected based on health concerns (whether those concerns are raised directly, or indirectly through some proxy such as property values).[35] Given the federal preemption regarding RF emissions, "concern over the decrease in property values may not be considered as substantial evidence if the fear of property value depreciation is based on concern over the health effects caused by RF emissions."[36] Because the unsupported speculation here regarding property values is itself premised on concerns over RF emissions, it cannot be considered.

Moreover, there was no evidence submitted with the Memorandum of the alleged effect on property values in San Francisco (or anywhere in California) from installation of a monopole. This omission is noteworthy not only because real estate market value predictions are location specific, but also because California realtor groups have conducted studies that show that residential property values are ***not*** negatively impacted by proximity to wireless communications towers.[37] Indeed, more and more homebuyers are placing a premium on wireless connectivity. Because there is no evidence – let alone substantial evidence – to support these general claims, the City cannot deny AT&T's application on these bases.

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[33] https://archives.hud.gov/offices/hsg/sfh/ref/sfhp1-18.cfm

[34] https://www.hud.gov/sites/default/files/OCHCO/documents/40001-hsgh-Update-17.pdf

[35] H.R. Conference Report No. 104-458, 208 (1996).

[36] *AT&T Wireless Services of California LLC v. City of Carlsbad*, 308 F.Supp.2d 1148, 1159 (S.D. Cal. 2003) (quoting H.R. Conference Report No. 104-458, 201 (1996)).

[37] *See* Joint Venture Silicon Valley Network, *Wireless Communications Initiative Study: Wireless Facilities Impact on Property Values* (Nov. 2012) (analyzed property values for over 1,600 single-family homes; concluded "It is quite clear from the data that the distance from a wireless facility has no apparent impact on the value or sale price").

3. The City Controls the Ultimate Height of the Project.

The Memorandum alleges that Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 would allow AT&T a unilateral right to expand the height of the Project. However, the Project is located on the Police Academy parcel and would be subject to a ground lease between the City and AT&T. As landlord, the City controls the ultimate height of the Project through the ground lease.

4. AT&T Has Established the Need for the Project.

AT&T's radio frequency engineers have identified a significant gap in service coverage and capacity in the City, including a large area bordered by the intersection of Amber Drive and Turquoise Way to the north, O'Shaughnessy Blvd. to the south and west, and Diamond Heights Blvd. to the east. This gap area includes numerous homes, businesses in the Diamond Heights Shopping Center, well-traveled roads, Glen Canyon Park, St. Nicholas Antiochian Orthodox Church and other points of interest in the vicinity. (See Attachment C – Radio Frequency Statement.)

In addition, the Project is a part of AT&T's commitment to supporting public safety through its partnership with FirstNet, the federal First Responder Network Authority. Conceived by the *9/11 Commission Report* as necessary for first responder communications, Congress created the federal First Responder Network Authority, which selected AT&T to build and manage FirstNet, the first-ever nationwide first-responder wireless network. The Project will provide new service on Band 14, which is the nationwide high-quality spectrum set aside by the U.S. government for public safety. Deployment of FirstNet in the subject area will improve public safety by putting advanced wireless technologies into the hands of public safety agencies and first responders.

AT&T's service coverage maps submitted with its CUA application depict coverage simulated by a sophisticated, industry-standard wireless network modeling tool. As seen in these coverage maps, AT&T's coverage gap impacts a large portion of the City, and this Project will close that gap. Specifically, AT&T has a significant gap in 4G LTE service coverage. In addition to being AT&T's core coverage layer, 4G LTE service on 700 MHz is the sole source of FirstNet service in San Francisco.

As part of the application process, the City requires an independent, third-party engineering verification of the coverage gap. AT&T's significant service coverage gap was peer reviewed and verified. (See Attachment D – Hammett & Edison, Inc. Letter.) This independent engineering analysis confirms that AT&T's network design service thresholds are industry standard. The engineers then verified this significant service coverage gap as depicted in AT&T's coverage maps by conducting a drive test, which concluded that AT&T has relatively weak signal

levels in the gap area, that those gaps are accurately depicted by the coverage maps, and that significant improvements in coverage will be achieved by installing the Project.

AT&T worked hard to carefully select the Project's location and design to minimize impacts to the community while maintaining a clear line-of-sight for signals to provide reliable wireless service coverage to the gap area. AT&T investigated alternative sites and designs, and evaluated multiple properties in the area, to make sure the Project was the least intrusive means to close the significant service coverage gap. (See Attachment E – Alternative Sites Analysis.) Specifically, AT&T analyzed seven (7) properties and found all locations other than the subject site at the Police Academy to be unavailable, infeasible, or both. AT&T did not identify another alternative that was available, feasible, and less intrusive. The City also did not identify a more-preferred alternative, let alone one that would be available and feasible.

In recommending approval of the application, Planning Staff found the Project "to be necessary, desirable, and compatible with the surrounding neighborhood, and not to be detrimental to persons or adjacent properties in the vicinity." Planning Staff also found the Project "will enhance the area's public safety infrastructure by providing improved wireless telecommunication services to the surrounding neighborhood at all times, as well as during natural disasters or other emergencies."

In approving the CUA, the Commission confirmed the location is the City's top preference and that the Project will meet all conditional use findings. The Commission specifically found the Project site preferable "based on factors including quality of coverage and aesthetics." The Commission explained in detail that "[t]he project complies with all relevant requirements and standards of the Planning Code and is consistent with objectives and policies of the General Plan…." The Commission further concluded that "as designed, the Project would contribute to the character and stability of the neighborhood and would constitute a beneficial development."

Coverage Data. The Memorandum suggests AT&T's coverage maps may not be based on adequate data and criticizes AT&T for not presenting its drive test data. But AT&T's verified, industry-standard coverage maps are the output from a sophisticated network design tool and are based on the complex analysis of many data sources. To evaluate signal strength and other network parameters, as well as to plan and build its wireless network, AT&T uses highly sophisticated software called Atoll, which employs a variety of databases and information sources, including AT&T network parameters, population data, type of area to be covered, clutter database (obstruction information such as dimensions of buildings, trees, and roads), and terrain information (above sea level height value for each 5 meter by 5 meter area). Atoll measures and simulates the existing and forecasted network and environment and can reliably simulate real-life existing and future wireless service coverage, to help identify and fill gaps in wireless network coverage. A key output from Atoll are coverage maps, like the ones provided here, that simulate signal propagation based on existing data and forecasted propagation based on proposed

network changes. And again, AT&T's coverage maps were verified with drive test data collected and analyzed by independent engineers.

Online Coverage Maps. The Memorandum points to coverage maps available online that show AT&T has some coverage in the area. But these FCC maps and other online maps, including AT&T's coverage viewer website, are depictions of outdoor service levels, and do not depict in-building service levels. AT&T needs to provide reliable in-building service to the significant gap area, which requires stronger signals than what is needed to provide outdoor or in-vehicle coverage. Indeed, the legends to AT&T's online maps explain the coverage depicted is only approximate outdoor coverage and that actual coverage is subject to many other variables.

When evaluating a significant service coverage gap, courts rely on coverage maps like the maps submitted with AT&T's CUA application. Courts do not rely on the types of online maps that the Memorandum mentions.[38] The Board, likewise, should rely on AT&T's coverage maps submitted with the CUA application and not on various online maps noted in the Memorandum (which do not address the level of coverage sought by AT&T).

5. The Project Does Not Implicate Geological Concerns.

Similar to the DHCA appeal letter, the Memorandum raises concerns regarding the mapped landslide zone and soil instability. As summarized in the SALEM report:

> Construction of the planned 104' monopole tower and supporting equipment is considered feasible. A site specific geotechnical investigation within the limits of the planned tower should be performed. The future geotechnical investigation would include recommendations to adequately address support of the tower within existing fills and will address seismic and soil stability concerns in accordance with current industry standards and requirements of the current California Building Code.

As explain in Sections IV.C and IV.D, above, the Project site is not within a mapped landslide zone and the slope instability is not a concern for the Project or the Project site.

[38] *See, e.g., L.A. SMSA Ltd. P'ship* , at *32-33 (online coverage maps depicting only a general view of Verizon's coverage are not determinative of the issue given the stronger RF engineering evidence of the gap); *City of Huntington Beach*, *31-38 (T-Mobile's engineering coverage maps used to design its network, and not its online maps depicting approximate outdoor coverage, amount to substantial evidence); *MetroPCS N.Y., LLC v. Village of East Hills*, 764 F.Supp.2d 441, 453-54 (E.D.N.Y. 2011); *Extenet Sys., Inc. v. Village of Plandome*, 2021 U.S. Dist. LEXIS 186651 (E.D.N.Y Sept. 29, 2021), *45-46 (coverage maps displayed on Verizon's website do not qualify as substantial evidence because they "are overwhelmingly outweighed" by Verizon's coverage maps and statement by its RF engineer).

6. Approval of the Project CUA Comports with Federal Law and Avoids an Unlawful Prohibition.

The TCA preempts a local government from denying an application for a wireless facility when doing so would "prohibit or have the effect of prohibiting the provision of personal wireless services."[39] Courts have found a permit denial to amount to an "effective prohibition" when a wireless provider demonstrates (1) a significant gap in wireless service coverage, and (2) that the Project would provide the "least intrusive means," in relation to the land use values embodied in local regulations, to provide the service coverage necessary to fill that gap.[40] When, as here, a wireless provider satisfies both of these requirements, state and local standards that would otherwise be sufficient to permit denial of the facility are preempted and the local government must approve the wireless facility.[41] In fact, once those two prongs are satisfied (as they are here) the burden shifts to the local government to show that another alternative is available that fills the significant gap in coverage, that it is technically feasible, and is less intrusive than the Project.[42] Here, City Staff and the Planning Commission concur that AT&T's Project is an appropriate solution to close AT&T's significant gap in service coverage.

The FCC has long ruled that an effective prohibition occurs whenever the decision of a local government materially inhibits wireless services,[43] and the Ninth Circuit has upheld this material inhibition standard,[44] and has held that the FCC's material inhibition standard "is consistent with" the judicial least intrusive means test.[45] According to the FCC, the "effective prohibition analysis focuses on the service the provider wishes to provide, incorporating the capabilities and performance characteristics it wishes to employ, including facilities deployment to provide existing services more robustly, or at a better level of quality, all to offer a more robust and competitive wireless service for the benefit of the public."[46] Thus, a local government "could

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[39] 47 U.S.C. § 332(c)(7)(B)(i)(II).

[40] *See e.g.*, *Metro PCS, Inc. v. City and County of San Francisco*, 400 F.3d 715, 734-35 (9th Cir. 2005), abrogated on other grounds, *T-Mobile South, LLC v. City of Roswell*, 135 S.Ct. 808 (2015); *Sprint PCS Assets, LLC v. City of Palos Verdes Estates*, 583 F.3d 716, 726 (9th Cir. 2009).

[41] *See City of Anacortes*, 572 F.3d at 998-99.

[42] *Id*., 572 F.3d at 998-99 ("A locality is not compelled to accept the provider's representations. However, when a locality rejects a prima facie showing, it must show that there are some potentially available and technologically feasible alternatives.").

[43] *See In the Matter of California Payphone Association Petition for Preemption, Etc*., Opinion and Order, FCC 97-251, 12 FCC Rcd 14191 (July 17, 1997); see also Infrastructure Order at ¶ 35.

[44] *City of Portland v. United States*, 969 F.3d 1020, 1034-35 (9th Cir. 2020), *cert. denied*, *City of Portland v. United States*, 141 S. Ct. 2855 (2021).

[45] *Sprint Telephony PCS, L.P. v. Cnty. of San Diego*, 543 F.3d 571, 578 (9th Cir. 2008).

[46] Infrastructure Order at n. 95.

materially inhibit service in numerous ways – not only by rendering a service provider unable to provide existing service in a new geographic area or by restricting the entry of a new provider in providing service in a particular area, but also by materially inhibiting the introduction of new services or the improvement of existing services."[47]

The Memorandum's Test for Effective Prohibition is Erroneous. The Memorandum relies on an inapplicable test for effective prohibition. The applicable tests are the FCC's material inhibition test and the judicial least intrusive means test, as described above. Yet the Memorandum claims AT&T failed to show that the Project is the only viable option to close its significant gap. That "only viable option" test has been expressly rejected by the Ninth Circuit.[48] Indeed, the correct test does not require AT&T to evaluate every single property in the target area[49] and shifts the burden to the City to identify an available, feasible, and less intrusive alternative.[50]

Against this controlling law, the Memorandum bases its argument on a lower level federal court in New York that decided the only way a provider could show an effective prohibition was to demonstrate that no calls could be placed in the gap area.[51] That decision does not apply to applications in the Ninth Circuit, as the Memorandum readily concedes. Indeed, the cited case actually ignored the Second Circuit's controlling precedent.[52] What's more, courts in the Ninth Circuit and the FCC have recognized significant service coverage gaps exist for a variety of reasons, including the inability to make voice calls, poor quality connections, slow data speeds, etc.[53]

The Memorandum strays even further from the applicable legal standard and suggests that an effective prohibition does not exist even when the evidence shows a coverage gap at a

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[47] Id. at ¶ 37

[48] *MetroPCS, Inc*., 400 F.3d at 734.

[49] *New Cingular Wireless v. Cnty. of Ventura*, 2022 U.S. Dist. LEXIS 53923, at *16 (TCA's least intrusive analysis does not require "elimination of every theoretical possible alternative") (citation omitted); *Cellco P'ship v. White Deer Twp. Zoning Hearing Bd*., 609 F. Supp. 3d 331, 339 (M.D. Pa. 2022); *Eco-Site, LLC v. Cnty. of Pueblo*, 2020 U.S. Dist. LEXIS 111855 (D. Colo. June 25, 2020), at *10.

[50] *City of Anacortes*, 572 F.3d at 998-99.

[51] *See Extenet Sys., Inc. v. Village of Flower Hill*, 2022 U.S. Dist. LEXIS 135267 (E.D.N.Y. July 29, 2022).

[52] *See TCG N.Y., Inc. v. City of White Plains*, 305 F.3d 67, 76 (2d Cir. 2002), cert. denied, 538 U.S. 923 (2003) (held "a prohibition does not need to be complete or 'insurmountable'" to violate the TCA as an effective prohibition).

[53] *See, e.g., Bay Area Cellular Tel Co. v. Francisco*, 2005 U.S. Dist. LEXIS 31927, *21 (N.D. Cal. Nov. 23, 2005); Infrastructure Order, at ¶ 37, n.87 (services covered under 47 U.S.C. §§ 253 and 322 include "any covered service a provider wishes to provide, incorporating the abilities and performance characteristics it wishes to employ, including to provide existing services more robustly, or at a higher level of quality—such as through filling a coverage gap, densification, or otherwise improving service capabilities.").

specific level of service. But case law in the Ninth Circuit makes abundantly clear that the gap analysis is not so limited.[54] In fact, courts within the Ninth Circuit analyze significant gaps service by service, finding an actionable coverage gap may exist at any level of service.[55] Moreover, focusing on AT&T's 4G LTE service is necessary in this case, since AT&T provides FirstNet services on its 4G LTE platform over its 700 MHz spectrum.

Because no available, feasible, and less intrusive alternative Project site has been identified, the Project needs to be approved to avoid an effective prohibition. While the Memorandum points out the City is not compelled to accept AT&T's proposal, the Memorandum fails to acknowledge that before it can deny the CUA, the City must identify an available, feasible, and less intrusive site for AT&T to construct its Project. The Commission has already concluded that the Project site is the only available and feasible location for the Project, and that no appropriate alternative site can be identified.

AT&T has demonstrated it has a significant service coverage gap in the vicinity of the Project. AT&T's coverage maps (submitted with its application and made part of the public record) depict and describe AT&T's service coverage gap in this portion of the City. Specifically, AT&T needs to provide reliable in-building service coverage in the gap area.[56] The proposed service coverage from the Project is depicted in the coverage maps. These coverage maps show that placing the Project in this location will close AT&T's significant service coverage gap.

AT&T's coverage maps are industry-standard maps based on sophisticated tools and a complex set of databases. These coverage maps are precisely what courts consider as evidence of significant gap in service coverage.[57] Courts also rely on drive tests when available.[58] Again, the existence and scope of AT&T's existing coverage gap is depicted on industry-standard

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[54] *MetroPCS, Inc*., 400 F.3d at 730 (proof of a general ban on wireless service is not necessary to prove an unlawful effective prohibition under the TCA).

[55] *See, e.g., L.A. SMSA Ltd. P'ship*, at *16-29 (while acknowledging existence of Verizon's 3G coverage, court found Verizon had significant service coverage gap in its 4G LTE service); *City of Huntington Beach*, at *17-24 (court separately analyzed gap analysis for T-Mobile's 2G, 3G, and 4G offerings).

[56] Courts within the Ninth Circuit and across the country hold the in-building standard is the appropriate benchmark for finding a significant service coverage gap exists. *See*, *e.g.*, *MetroPCS Inc. v. City & Cnty. of San Francisco*, No. 4:02-cv-03442-PJH, 2006 U.S. Dist. LEXIS 43985, at *10 (N.D. Cal. June 16, 2006) ("*MetroPCS II*") (held that large "coverage holes" that "extend to the interior of buildings," are actionable under the Act); *T-Mobile W. Corp. v. City of Huntington Beach*, No. 2:10-cv-02835-CAS (Ex), 2012 U.S. Dist. LEXIS 148170, *11-12, *49 (C.D. Cal. Oct. 10, 2012) (held that "providing reliable in-building wireless service . . . is essential, and its absence constitutes a significant gap in coverage"; ruled T-Mobile demonstrated significant gaps in in-building coverage); *L.A. SMSA Ltd. P'ship. City of L.A.*, No. 2:16-cv-04954-FLA, 2021 U.S. Dist. LEXIS 160046, *21-26 (C.D. Cal. Aug. 24, 2021) (gaps in in-home wireless service coverage constitute a significant coverage gaps).

[57] *See, e.g., MetroPCS II, at *17*-32; *L.A. SMSA Ltd. P'ship,* at *16-34; *City of Huntington Beach*, at *16-25, 38.

[58] *Id*.

coverage maps and verified by drive test data collected and analyzed by an independent engineer.

AT&T has presented a meaningful comparison of all candidate locations, described the Project, and explained why the other sites and designs are not viable. Neither AT&T nor the City has identified another viable site. As the analysis demonstrates, the Project is not only the best available and least intrusive means to do so, but the only way for AT&T to bring critical wireless services to the Project site area. Approval of AT&T's application is required to avoid an effective prohibition. The Planning Commission's approval comports with federal law. The Board should approve AT&T's application and deny the appeal.

VI. Conclusion

As discussed above, the Planning Commission's findings for the Project Conditional Use Authorization Approval are supported by substantial evidence. The appeal does not raise concerns to justify reversing the approval of AT&T's application. Even if the Board was to identify a code-based reason to disfavor the Project, the City is preempted from effectively prohibiting wireless service. As a practical matter, there is no need for the Board to rule against the proper application of federal law. The Project is well-designed, meets applicable standards, and will provide vast improvements to wireless services for wireless customers and first responders. DHCA has provided no substantial evidence to support its arguments on appeal. AT&T requests the Board deny the appeal and uphold the Project's CUA Approval.

ATTACHMENT A
Updated Site Plans

AT&T SITE NUMBER: CCL05350
AT&T SITE NAME: SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131
JURISDICTION: CITY OF SAN FRANCISCO
APN: 7521005

SITE TYPE: OUTDOOR / MONOPOLE

INITIATIVE/PROJECT: NSB
USID #: 330307
FA LOCATION CODE: 15906588
RFDS ID: RFDS-1702
RFDS VERSION: 1.00
RFDS DATE: 01/26/2024
PACE JOB #: MRSFR095386
PTN #: 3701A15N2L

PROJECT DESCRIPTION

A (N) AT&T UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF INSTALLING:

- INSTALLATION OF A 20'-0" X 27'-6" AT&T TELECOMMUNICATIONS FACILITY (~550 SQ. FT.)
- INSTALLATION OF A AT&T 103'-0" MONOPOLE
- INSTALLATION OF A AT&T 8' CHAIN LINK FENCE
- INSTALLATION OF (2) AT&T 6' WIDE AND (1) 4' WIDE CHAIN LINK GATES
- INSTALLATION OF AT&T ANTENNA MOUNTING ASSEMBLIES AT A 100'-0" CENTERLINE
- INSTALLATION OF (12) AT&T PANEL ANTENNAS MOUNTED AT A 100'-0" CENTERLINE ((4) PER SECTOR)
- INSTALLATION OF (9) AT&T REMOTE RADIO UNITS (RRUS) ((3) PER SECTOR)
- INSTALLATION OF (3) AT&T TOWER MOUNTED DC-9 SURGE SUPPRESSORS
- INSTALLATION OF (1) FIRSTNET BY AT&T GPS UNIT MOUNTED ON PROPOSED OUTDOOR EQUIPMENT CABINET
- INSTALLATION OF (1) WALK-UP CABINET (WUC) EQUIPMENT CABINET
- INSTALLATION OF A NEW AT&T 30KW COMPACT GENERATOR WITH 150 GALLON FUEL TANK MOUNTED TO NEW 4'-0" X 6'-0" CONCRETE PAD
- NEW FIBER CONDUIT RUN TO FIBER CABINET
- INSTALLATION OF (1) AT&T CIENA AND (1) HOFFMAN BOX MOUNTED TO A NEW H-FRAME

PROJECT INFORMATION

SITE NAME:	SF POLICE ACADEMY	SITE ACQUISITION COMPANY:	NEXTEDGE NETWORKS 240 STOCKTON STREET SAN FRANCISCO, CALIFORNIA 94108
SITE #:	CCL05350		
COUNTY:	SAN FRANCISCO COUNTY	LEASING CONTACT:	ATTN: LORRIE BILLALON (510) 825-8889 LBILLALON@MODUSLLC.COM
JURISDICTION:	CITY OF SAN FRANCISCO		
APN :	7521005	ZONING CONTACT:	ATTN: CAROLINE STYC (916) 801-3565 CSTYC@MODUSLLC.COM
SITE ADDRESS:	350 AMBER DRIVE SAN FRANCISCO, CALIFORNIA 94112		
CURRENT ZONING:	PUBLIC (P)	CONSTRUCTION CONTACT:	ATTN: KEITH CONNER (408) 306-3801 GKCONNER@BECHTEL.COM
CONSTRUCTION TYPE:	V-B		
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)		
POWER:	PG&E		
LATITUDE:	N 37° 44' 37.8" NAD 83 N 37.743820° NAD 83		
LONGITUDE:	W 122° 26' 19.7" NAD 83 W -122.441591° NAD 83		
GROUND ELEVATION:	±554.0' AMSL		
PROPERTY OWNER:	CITY & COUNTY OF SAN FRANCISCO 25 VAN NESS AVENUE, STE. 400 SAN FRANCISCO, CALIFORNIA 94102		
APPLICANT:	AT&T MOBILITY 5001 EXECUTIVE PARKWAY SAN RAMON, CALIFORNIA 94583		

VICINITY MAP



DRIVING DIRECTIONS

FROM: 5005 EXECUTIVE PARKWAY, SAN RAMON, CALIFORNIA 94583
TO: 350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

HEAD NORTH	82 FT
TURN RIGHT	0.2 MI
TURN RIGHT TOWARD EXECUTIVE PKWY	295 FT
TURN RIGHT ONTO EXECUTIVE PKWY	0.2 MI
TURN LEFT ONTO CAMINO RAMON	0.8 MI
USE THE LEFT 2 LANES TO TURN LEFT ONTO CROW CANYON RD	0.2 MI
USE THE RIGHT 2 LANES TO MERGE ONTO I-680 N VIA THE RAMP TO SACRAMENTO	0.4 MI
MERGE ONTO I-680 N	9.2 MI
USE THE RIGHT 2 LANES TO TAKE EXIT 46A FOR STATE ROUTE 24 TOWARD OAKLAND/LAFAYETTE	1.1 MI
CONTINUE ONTO CA-24 W	8.1 MI
KEEP LEFT AT THE FORK TO STAY ON CA-24 W	4.3 MI
USE THE RIGHT 2 LANES TO TAKE EXIT 2B TO MERGE ONTO I-580 W TOWARD SAN FRANCISCO	1.5 MI
USE THE LEFT 3 LANES TO TAKE EXIT 19A TO MERGE ONTO I-80 W TOWARD SAN FRANCISCO	8.5 MI
MERGE ONTO US-101 S	2.0 MI
USE THE RIGHT 2 LANES TO TAKE EXIT 431 TO MERGE ONTO I-280 S TOWARD DALY CITY	1.6 MI
TAKE EXIT 52 FOR MONTEREY BLVD	0.2 MI
TURN RIGHT ONTO MONTEREY BLVD	0.1 MI
CONTINUE ONTO DIAMOND ST	0.4 MI
TURN LEFT TO STAY ON DIAMOND ST	0.2 MI
TURN RIGHT TO STAY ON DIAMOND ST	226 FT
TURN RIGHT ONTO DIAMOND HEIGHTS BLVD	0.6 MI
TURN LEFT ONTO DUNCAN ST	344 FT
TURN LEFT ONTO AMBER DR	72 FT
TURN LEFT	184 FT
TURN LEFT	23 FT
TURN RIGHT	279 FT
TURN RIGHT	161 FT
DESTINATION WILL BE ON THE LEFT	

ESTIMATED TIME: 1 HOUR 2 MINUTES ESTIMATED DISTANCE: 40.1 MILES

CODE COMPLIANCE

ALL WORK & MATERIALS SHALL BE PERFORMED & INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO H=THESE CODES:

2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, VOLUME 1&2, TITLE 24 C.C.R.
(2021 INTERNATIONAL BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R.
(2021 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
2021 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
(2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
2022 CALIFORNIA REFERENCE STANDARDS, PART 12 TITLE 24 C.C.R.
ANSI/EIA-TIA-222-H
ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE, TITLE 24 PART 2, SECTION 11B-203.5

SHEET INDEX

SHEET NO.	DESCRIPTION	REV
T-1	TITLE SHEET	0
T-2	SITE SIGNAGE	0
C-1	SITE SURVEY	0
A-1	OVERALL SITE PLAN	0
A-1.1	ENLARGED SITE PLAN	0
A-2	SITE DETAIL	0
A-2.1	SITE DETAIL WITH DIMENSIONS	0
A-3	ANTENNA LAYOUT AND EQUIPMENT SCHEDULE	0
A-4	NORTHEAST AND SOUTHEAST ELEVATIONS	0
A-5	SOUTHWEST AND NORTHWEST ELEVATIONS	0
D-1	EQUIPMENT DETAILS	0
D-2	EQUIPMENT DETAILS	0
D-3	GENERATOR DETAILS	0
E-1	UTILITY ROUTING, PANEL SCHEDULE, SINGLE LINE DIAGRAM AND NOTES	0

PROJECT INFORMATION:
CCL05350
SF POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR
at&t
5005 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:
NextEdge
NEXTEDGE NETWORKS
1355 WINDWARD CONCOURSE, SUITE 410
ALPHARETTA, GEORGIA 30005

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	11/18/25	100% ZONING	R.C.

LICENSURE:

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SHEET TITLE:
TITLE SHEET

SHEET NUMBER
T-1

at&t

This Site Operated by:

AT&T MOBILITY

5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583
IN CASE OF FIRE AND THE NEED FOR SHUTDOWN
TO ACTIVATE ANTENNAS CALL THE
FOLLOWING NUMBER:
For 24 Hour Emergency Contact and Access Please Call:
(800) 638-2822

Reference Site#: CCL05350
Site Address: 350 AMBER DRIVE, SAN FRANCISCO, CA 94131

FENCE COMPOUND SIGNAGE | SCALE: NONE | 11

FOR FUEL & OTHER
ENVIRONMENTAL
EMERGENCIES
CALL EH&S
1-800-566-9347
1-800-KNOW-EHS

YELLOW EH&S SIGN | SCALE: NONE | 7

WARNING

CANCER AND REPRODUCTIVE HARM
WWW.P65WARNINGS.CA.GOV

AVERTISSEMENT

CANCER ET EFFET NOCIF SUR IS REPRODUCTION
WWW.P65WARNINGS.CA.GOV

AVERTISSEMENT

PRODUCE CANDER Y DANCS REPRODUCTIVOS
WWW.P65WARNINGS.CA.GOV

PROP 65 | SCALE: NONE | 5

SIGNAGE AND STRIPING INFORMATION

1. THE FOLLOWING INFORMATION IS A GUIDELINE WITH RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATIONS SHOULD BE IN CONNECT WITH ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER.
2. THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BT AT&T IS 1mWcm*2 AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5mWcm*2.
3. IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR WORKING PLATFORM LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
4. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF THE SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
5. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR THAT CANNOT BE LOCKED, OR FIRE EGRESS) THEN BOTH BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING SHALL BE PLACED AROUND THE ANTENNAS, THE EXACT EXTENT OF THE BARRICADES & STRIPING SHALL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER COMPLETION OF SITE CONSTRUCTION. USE THE PLANS AS A GUIDELINES FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
6. ALL TRANSMIT ANTENNAS REQUIRE A THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, SPANISH, AND CHINESE. THIS SIGN SHALL BE PROVIDED TO THE CONTRACTOR Y THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED IN PLAIN SIGHT AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES. THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS SHALL HAVE AT&T'S NAME AND THE COMPANY CONTACT INFORMATION (e.g. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER SHALL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
7. PHOTOS OF ALL STRIPING, BARRICADES AND SIGNAGE SHALL BE PART OF THE CONTRACTORS CLOSE OUT PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION PACKAGE & SHALL BE TURNED INTO THE AT&T CONSTRUCTION MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE WITH FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS-HATCH PATTERN AS DETAILED BY THE CONSTRUCTION DRAWINGS. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO AS NOT TO BLOCK OR INTERFERE WITH THE OPERATION OF THE ANTENNAS. BARRICADES SHALL BE PAINTED WITH FADE RESISTANT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE WITH ALL RF FRIENDLY BARRICADES NEEDED, & SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER WITH A DETAILED SHOP DRAWING OF EACH BARRICADES. UPON CONSTRUCTION COMPLETION.

GENERAL NOTES | SCALE: NONE | 2

DANGER

NO
TRESPASSING

FENCED COMPOUND SIGNAGE | SCALE: NONE | 14

INFORMATION

Federal Communications Communication Tower
Registration Number

1 2 3 4 5 6 7

Posted in accordance with Federal Communications
Commission rules and antenna tower registration
47CFR 17.4 (g).

8"
12"

FCC ASR SIGNAGE | SCALE: NONE | 10

DIESEL FUEL

COMBUSTIBLE
NO SMOKING
NO OPEN FLAMES

FUEL TANK CAPACITY 150 GALS

FUEL TYPE SIGN | SCALE: NONE | 6



NFPA 704 HAZARD DIAMOND SIGN | SCALE: NONE | 4

NOTICE
AUTHORIZED
PERSONNEL
ONLY

DOOR / EQUIPMENT SIGN | SCALE: NONE | 13

Property of AT&T

Authorized
Personnel Only

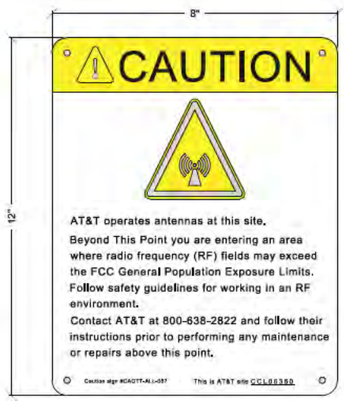
No Trespassing
Violators will be prosecuted

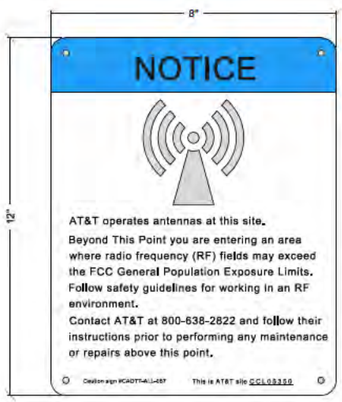
In case of emergency, or prior to performing maintenance on this site, call (800) 638-2822 and reference cell site number CCL05350

GATE SIGNAGE | SCALE: NONE | 9

NOTE:
1. CONTRACTOR SHALL INSTALL ALL INFORMATION SIGNAGE IN ACCORDANCE W/ AT&T WIRELESS DOCUMENT #03-0074, RF EXPOSURE POLICY AND RF SAFETY COMPLIANCE PROGRAM, LATEST EDITION.
2. CONTRACTOR SHALL CONTACT AT&T R-RFSC FOR INFORMATION ON MPE LEVELS AND INSTRUCTIONS ON LEVEL AND LOCATION OF SIGNAGE.







CAUTION AND WARNING SIGN | SCALE: NONE | 3

NOTICE SIGN | SCALE: NONE | 1

0
3 2
ACID

NFPA HAZARD SIGN | SCALE: NONE | 12

Property of AT&T

Authorized
Personnel Only

In case of emergency, or prior to performing maintenance on this site, call (800) 638-2822 and reference cell site number CCL05350

CABINET DOORS SIGNAGE | SCALE: NONE | 8

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5005 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:

NextEdge

NEXTEDGE NETWORKS
1355 WINDWARD CONCOURSE, SUITE 410
ALPHARETTA, GEORGIA 30005

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	11/18/25	100% ZONING	R.C.

LICENSURE:

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SHEET TITLE:

SITE SIGNAGE

SHEET NUMBER

T-2

BASIS OF BEARINGS

THE BEARINGS ARE BASED UPON CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD 83

BENCHMARK:

TRIMBLE R10-2 GPS SYSTEM WAS USED TO OBSERVE ONSITE CONTROL. DATA PROCESSED THROUGH NATIONAL GEODETIC SURVEY'S ONLINE POSITIONING USER SERVICE TO OBTAIN STATE PLANE COORDINATES AND LATITUDE AND LONGITUDE (NAD 83) ALONG WITH ELEVATIONS (NAVD 88).

NOTES:

1. DATE OF SURVEY: 12/14/2023
2. ACREAGE PARCEL: XXX ACRES
3. ASSESSOR'S PARCEL NUMBER(S): XXX-XX-XXX
4. PROPOSED LEASE AREA: F.FF' x F.FF' = FFF SQUARE FEET
5. PROPERTY OWNER(S):
6. MAGNETIC DECLINATION: XX.XX°
7. CONVERGENCE ANGLE: -X°XX'XX"

FIRM CLASSIFICATION

THE PROPERTY SHOWN HEREON FALLS WITHIN ZONE "X" AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 06075C0230A, EFFECTIVE DATE MARCH 23, 2021, AS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM.

(ZONE "X" BEING CLASSIFIED AS AREAS OF MINIMAL FLOOD HAZARD PER SAID F.E.M.A. MAP ABOVE)

PROPOSED ANTENNA GEODETIC COORDINATES

THE CENTER OF THE PROPOSED ANTENNAS AS SHOWN HEREON IS LOCATED AT THE FOLLOWING COORDINATES (NAD 83):

LATITUDE: N XX°XX'XX.XX"
LONGITUDE: W XXX°XX'XX.XX"

THE LATITUDE AND LONGITUDE SHOWN HERON WERE DERIVED FROM DATA COLLECTED USING A TRIMBLE R10-2 GNSS DUAL FREQUENCY RECEIVER AND PROCESSED THROUGH THE NATIONAL GEODETIC SURVEY ONLINE POSITIONAL USER SERVICE. ACCURACY FOR KINEMATIC SURVEYING USING A TRIMBLE R10-2 GNSS RECEIVER IS HORIZONTALLY ±10MM+1 PPM RMS.

LEGEND

AC	=	ASPHALTIC CONCRETE
EP	=	EDGE OF PAVEMENT
FL	=	FLOWLINE
FS	=	FINISHED SURFACE
GD	=	GROUND ELEVATION
TC	=	TOP OF CURB
AGL	=	ABOVE GRADE LEVEL
AMSL	=	ABOVE MEAN SEA LEVEL
TTOP	=	TREETOP ELEVATION

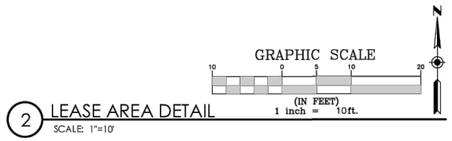
1 BOUNDARY & LEGAL DESCRIPTIONS

SCALE: NONE



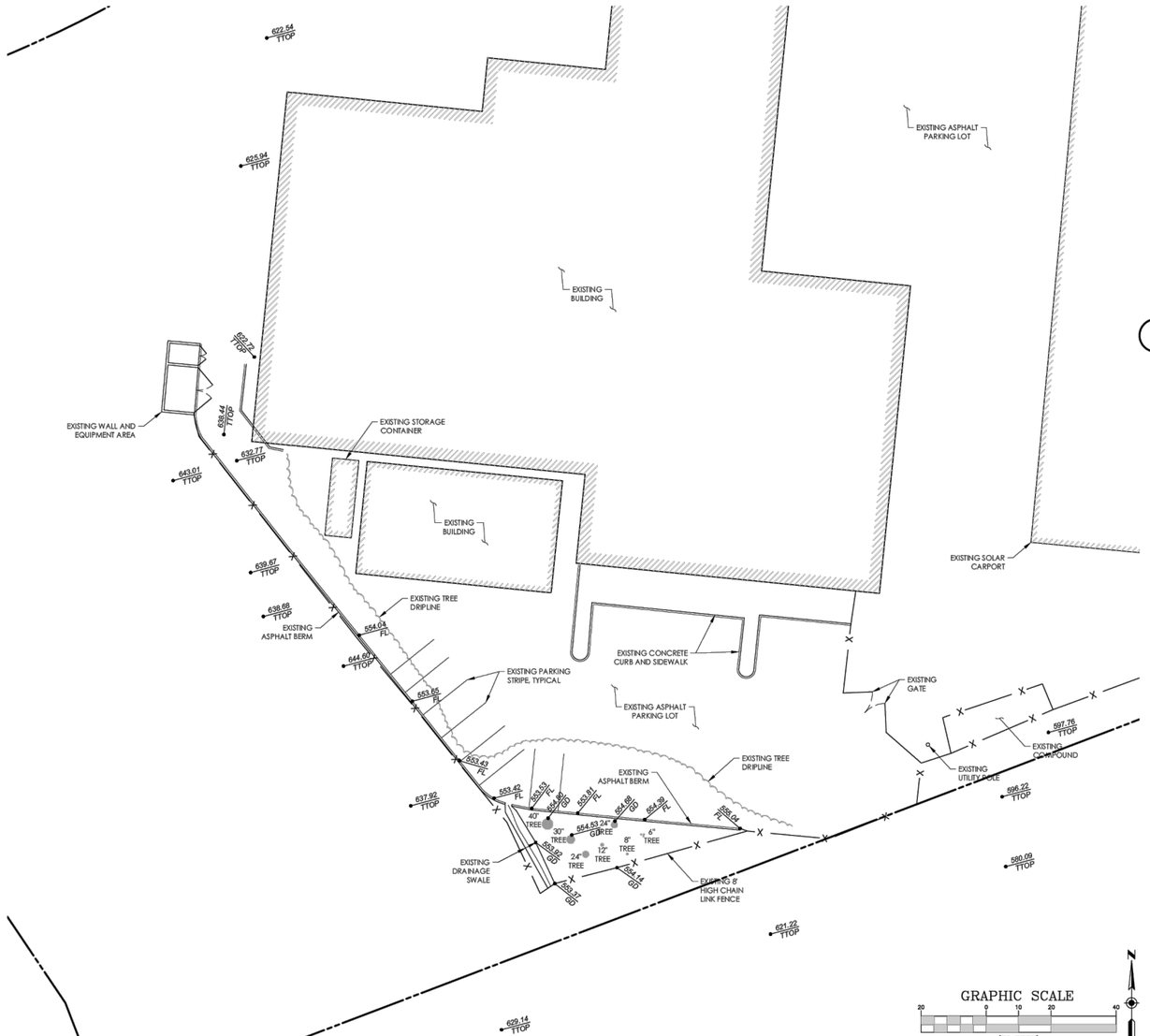
2 LEASE AREA DETAIL

SCALE: 1"=10'



3 SITE PLAN

SCALE: 1"=20'



4 BOUNDARY PLAN

SCALE: 1"=60'

at&t
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 94583

PROJECT INFORMATION:

CCL05350

350 AMBER DR
SAN FRANCISCO, CA

CURRENT ISSUE DATE:

01/05/2024

ISSUED FOR:

90% SURVEY

REV.:	DATE:	DESCRIPTION:	BY:

COORDINATING ARCHITECT:

ODI OMNI DESIGN INCORPORATED
Cal y Mayor Group
ARCHITECTURE | ENGINEERING | SURVEYING
1326 Chorro Street, San Luis Obispo, CA 93401
Office: 805.544.9700 www.omnidesign.us

SEAL:

PROFESSIONAL LAND SURVEYOR
MATHEW W. MARCHELL
NO. PLS9632
STATE OF CALIFORNIA

CONSULTANT:

DRAWN BY:	CHK.:	APV.:
MWM	MWM	MWM

SHEET TITLE:

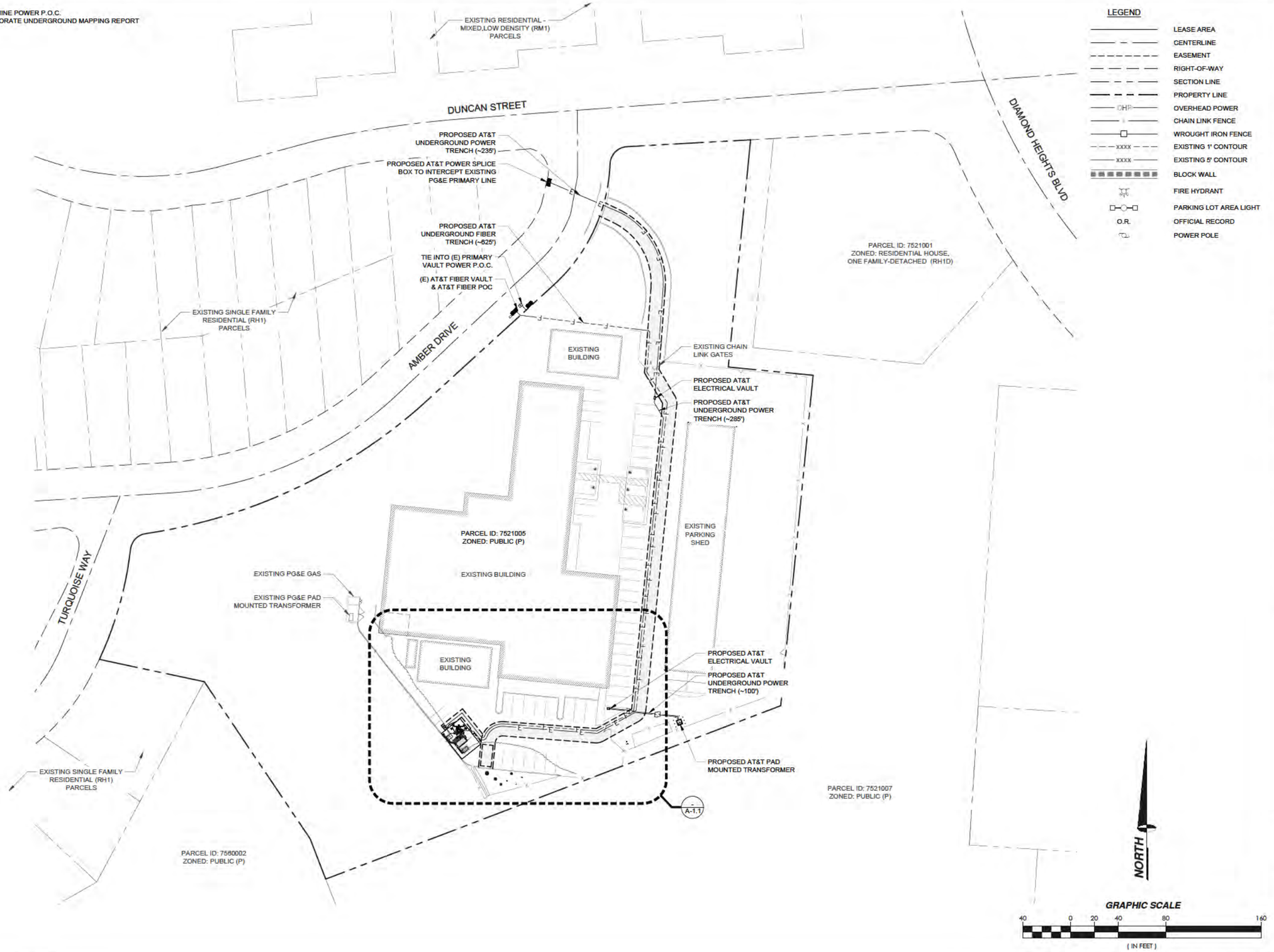
LEASE AREA DETAIL
SITE & BOUNDARY PLAN

SHEET NUMBER: REVISION:

C-1

1180-10XX

NOTE:
1. PG&E TO DETERMINE POWER P.O.C.
2. NEED TO INCORPORATE UNDERGROUND MAPPING REPORT



LEGEND

	LEASE AREA
	CENTERLINE
	EASEMENT
	RIGHT-OF-WAY
	SECTION LINE
	PROPERTY LINE
OHP	OVERHEAD POWER
	CHAIN LINK FENCE
	WROUGHT IRON FENCE
XXXX	EXISTING 1' CONTOUR
XXXX	EXISTING 5' CONTOUR
	BLOCK WALL
	FIRE HYDRANT
	PARKING LOT AREA LIGHT
O.R.	OFFICIAL RECORD
	POWER POLE

OVERALL SITE PLAN

11" X 17" SCALE	24" X 36" SCALE
1" = 80'	1" = 40'

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5005 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

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NextEdge

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1355 WINDWARD CONCOURSE, SUITE 410
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DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

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0	11/18/25	100% ZONING	R.C.

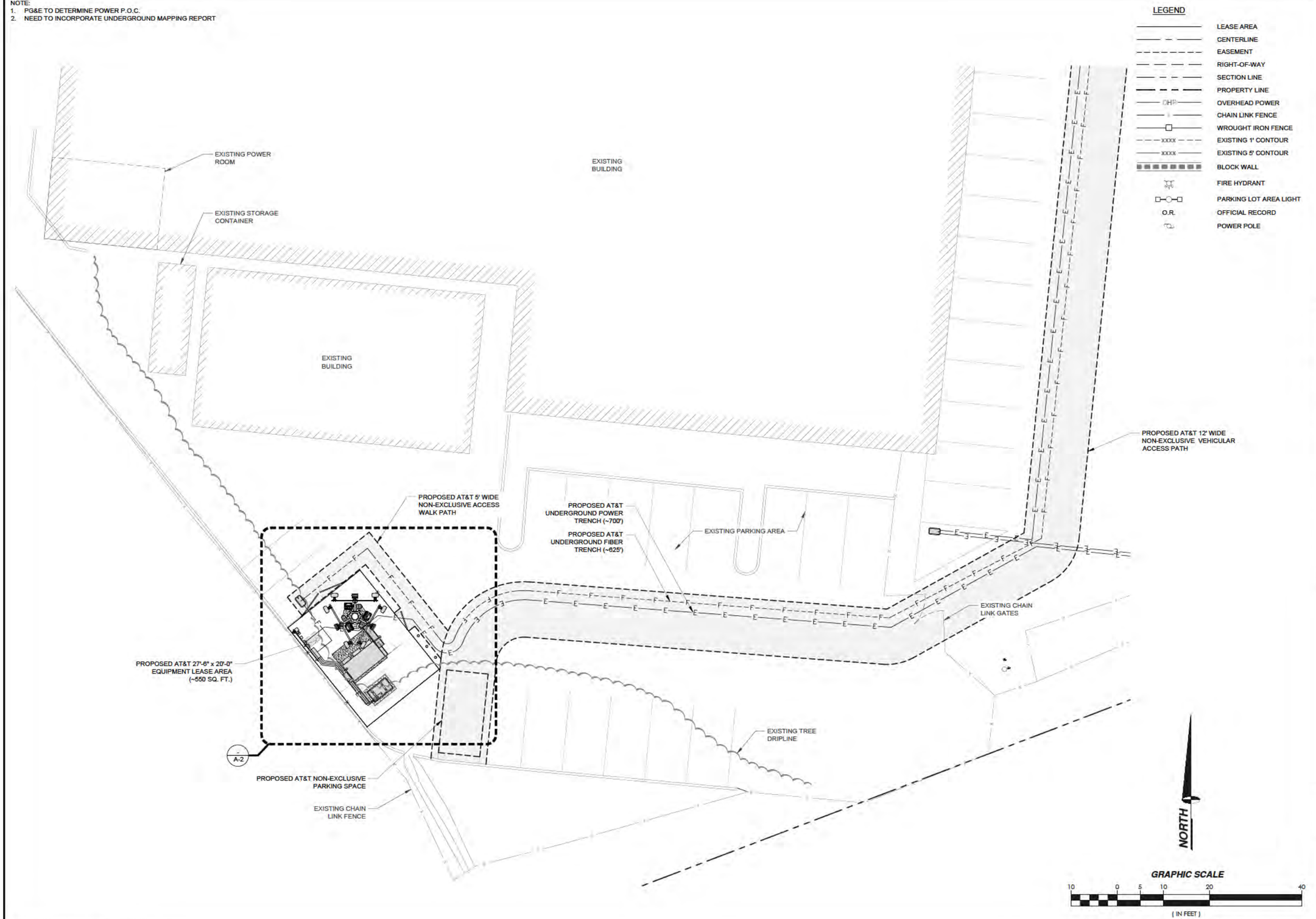
LICENSURE:

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SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER
A-1

NOTE:
1. PG&E TO DETERMINE POWER P.O.C.
2. NEED TO INCORPORATE UNDERGROUND MAPPING REPORT



LEGEND

	LEASE AREA
	CENTERLINE
	EASEMENT
	RIGHT-OF-WAY
	SECTION LINE
	PROPERTY LINE
OHP	OVERHEAD POWER
	CHAIN LINK FENCE
	WROUGHT IRON FENCE
XXXX	EXISTING 1' CONTOUR
XXXX	EXISTING 5' CONTOUR
	BLOCK WALL
	FIRE HYDRANT
	PARKING LOT AREA LIGHT
O.R.	OFFICIAL RECORD
	POWER POLE

ENLARGED SITE PLAN

11" X 17" SCALE	24" X 36" SCALE
1" = 20'	1" = 10'

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5005 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

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LICENSURE:

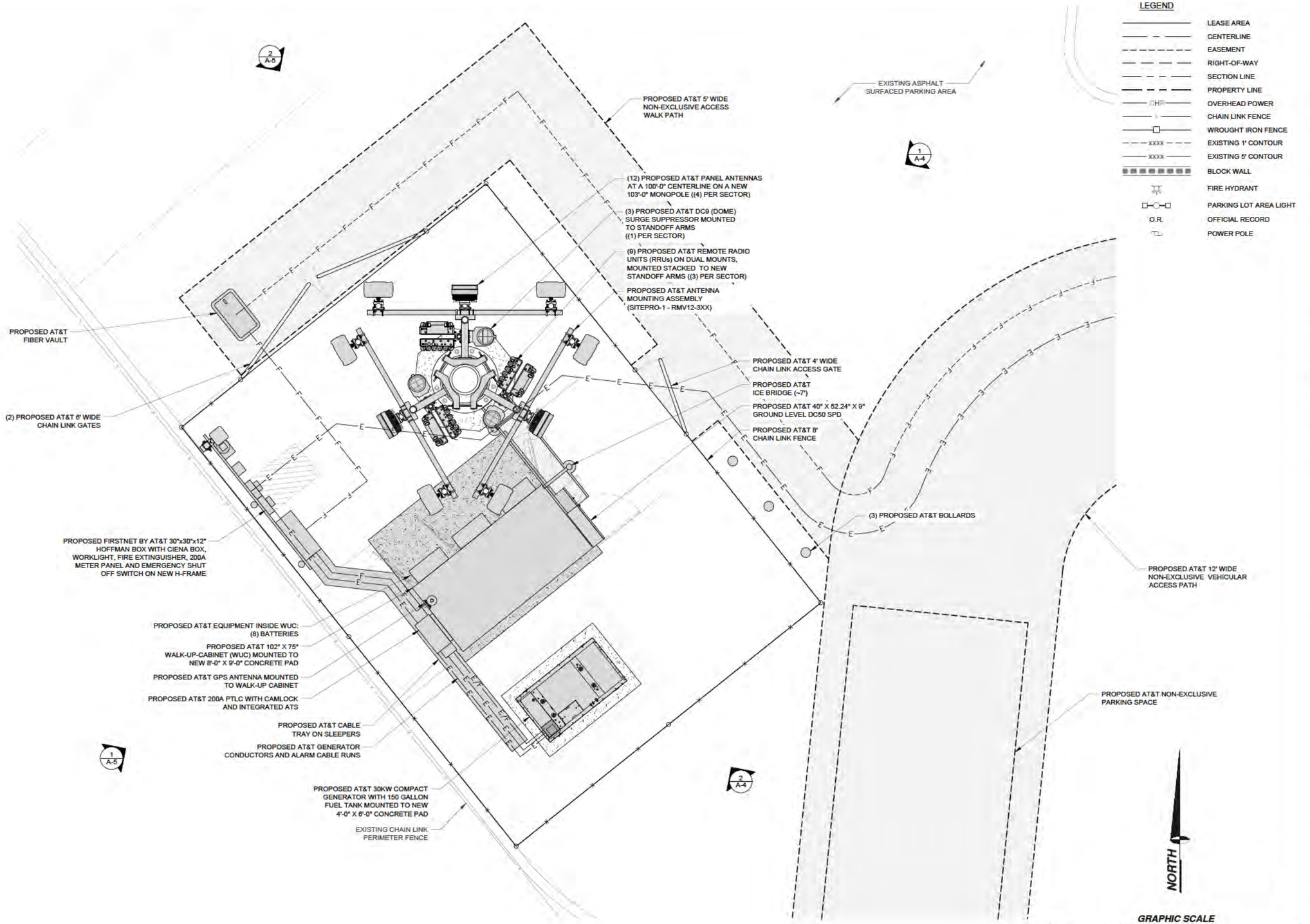
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SHEET TITLE:

ENLARGED SITE PLAN

SHEET NUMBER

A-1.1



SITE DETAIL

11" X 17" SCALE	24" X 36" SCALE	
1" = 5'	1" = 2'-6"	1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5005 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:

NextEdge

NEXTEDGE NETWORKS
1355 WINDWARD CONCOURSE, SUITE 410
ALPHARETTA, GEORGIA 30005

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	11/18/25	100% ZONING	R.C.

LICENSURE:

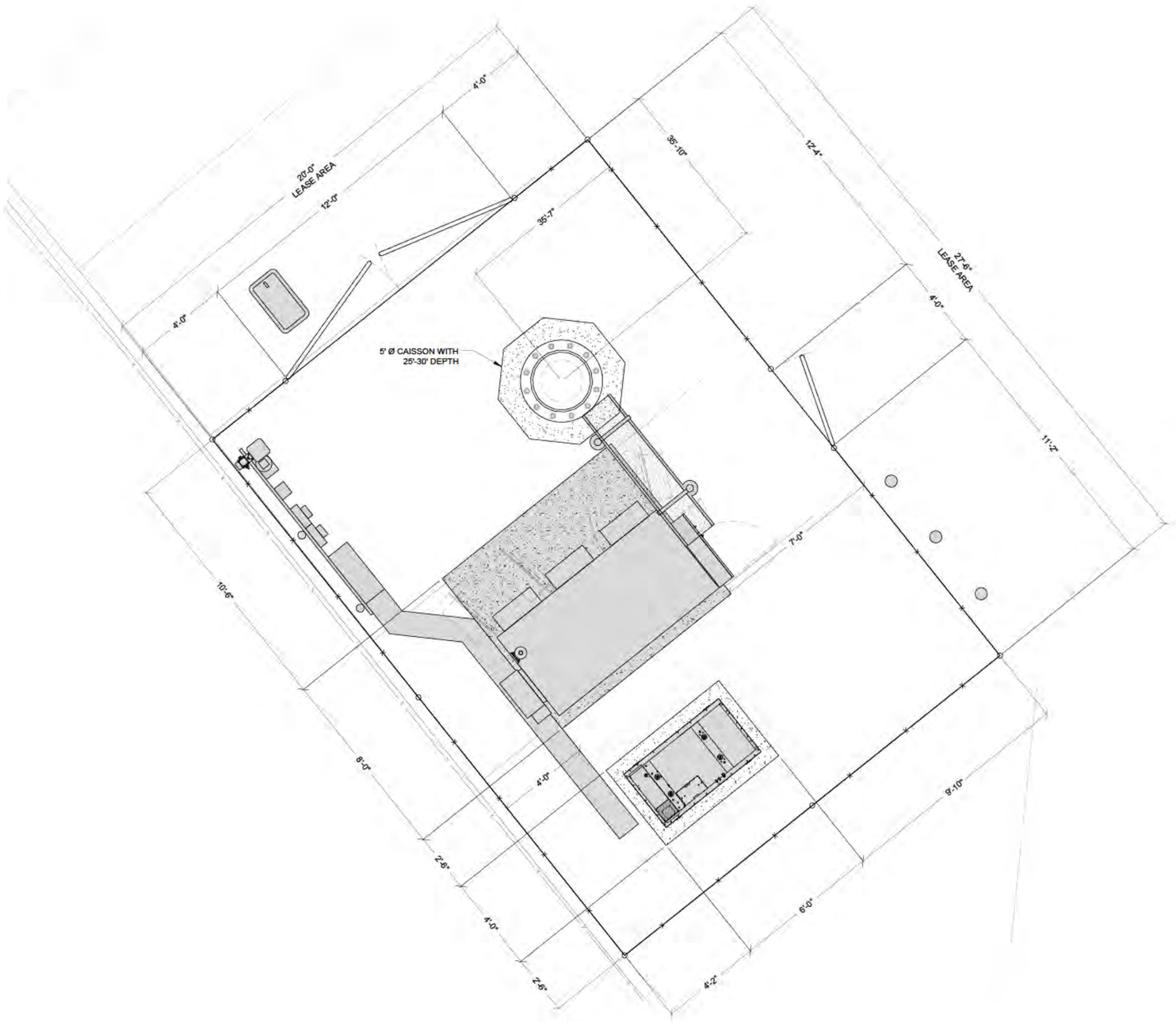
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SHEET TITLE:

SITE DETAIL

SHEET NUMBER

A-2



LEGEND

- LEASE AREA
- CENTERLINE
- EASEMENT
- RIGHT-OF-WAY
- SECTION LINE
- PROPERTY LINE
- OHP — OVERHEAD POWER
- CHAIN LINK FENCE
- WROUGHT IRON FENCE
- XXXX — EXISTING 1' CONTOUR
- XXXX — EXISTING 5' CONTOUR
- BLOCK WALL
- FIRE HYDRANT
- PARKING LOT AREA LIGHT
- O.R. — OFFICIAL RECORD
- POWER POLE

NOTE:
PROPOSED ANTENNAS AND TOWER MOUNTED APPURTENANCES NOT SHOWN FOR CLARITY

NORTH

GRAPHIC SCALE

2.5 0 1.25 2.5 5 10

(IN FEET)

SITE DETAIL WITH DIMENSIONS

11" X 17" SCALE	24" X 36" SCALE
1" = 5'	1" = 2'-6"

1

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SHEET TITLE:

SITE DETAIL WITH DIMENSIONS

SHEET NUMBER

A-2.1

	POSITION	ANTENNA AZIMUTH	ANTENNA MAKE	ANTENNA MODEL	RRUs	EQUIPMENT CENTERLINE	CABLE TYPE	CABLE LENGTH
ALPHA SECTOR	1	0°	QUINTEL	QD868-2	(1) RADIO 4490 B5/B12A	100'-0"	(18) FIBER JUMPERS	135'
	2 (TOP)		ERICSSON	AIR6419 B77G (TOP)	INTEGRATED WITHIN AIR6419			
	2 (BOTTOM)		ERICSSON	AIR6419 B77D (BOTTOM)	INTEGRATED WITHIN AIR6449			
	3		QUINTEL	QD6612-2	(1) RADIO 4478 B14 (1) RADIO 4890 B25/B66			
BETA SECTOR	1	240°	QUINTEL	QD868-2	(1) RADIO 4490 B5/B12A	100'-0"	(18) FIBER JUMPERS	135'
	2 (TOP)		ERICSSON	AIR6419 B77G (TOP)	INTEGRATED WITHIN AIR6419			
	2 (BOTTOM)		ERICSSON	AIR6419 B77D (BOTTOM)	INTEGRATED WITHIN AIR6449			
	3		QUINTEL	QD6612-2	(1) RADIO 4478 B14 (1) RADIO 4890 B25/B66			
GAMMA SECTOR	1	120°	QUINTEL	QD868-2	(1) RADIO 4490 B5/B12A	100'-0"	(18) FIBER JUMPERS	135'
	2 (TOP)		ERICSSON	AIR6419 B77G (TOP)	INTEGRATED WITHIN AIR6419			
	2 (BOTTOM)		ERICSSON	AIR6419 B77D (BOTTOM)	INTEGRATED WITHIN AIR6449			
	3		QUINTEL	QD6612-2	(1) RADIO 4478 B14 (1) RADIO 4890 B25/B66			

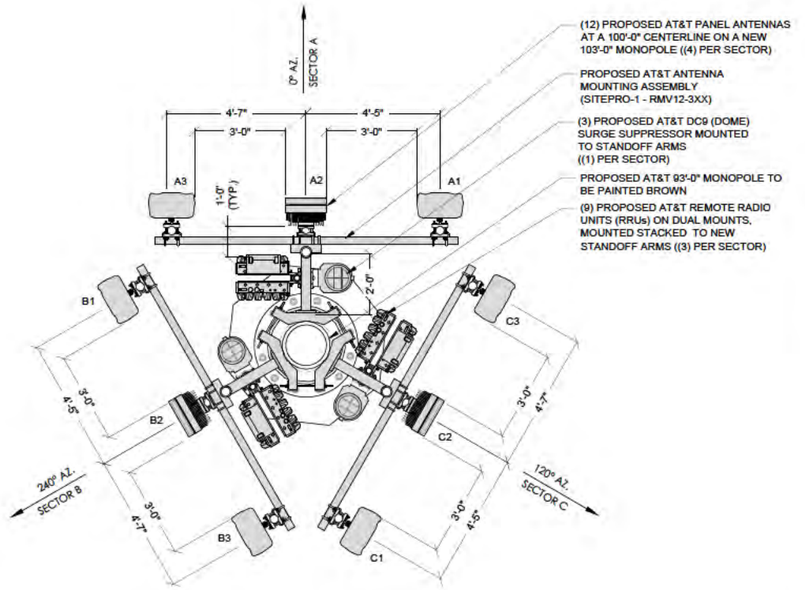
ANTENNA AND EQUIPMENT SCHEDULE

RFDS ID	RFDS-1702
RFDS DATE	01/26/2024
RFDS VERSION	1.00

NOTE:
1. ANTENNA POSITION ARE LEFT TO RIGHT FROM FRONT OF ANTENNA

ANTENNA & EQUIPMENT SCHEDULE

SCALE: NONE | 2



NORTH

GRAPHIC SCALE

2.5 0 1.25 2.5 5 10

(IN FEET)

ANTENNA LAYOUT

11" X 17" SCALE	24" X 36" SCALE	1
1" = 5'	1" = 2'-6"	

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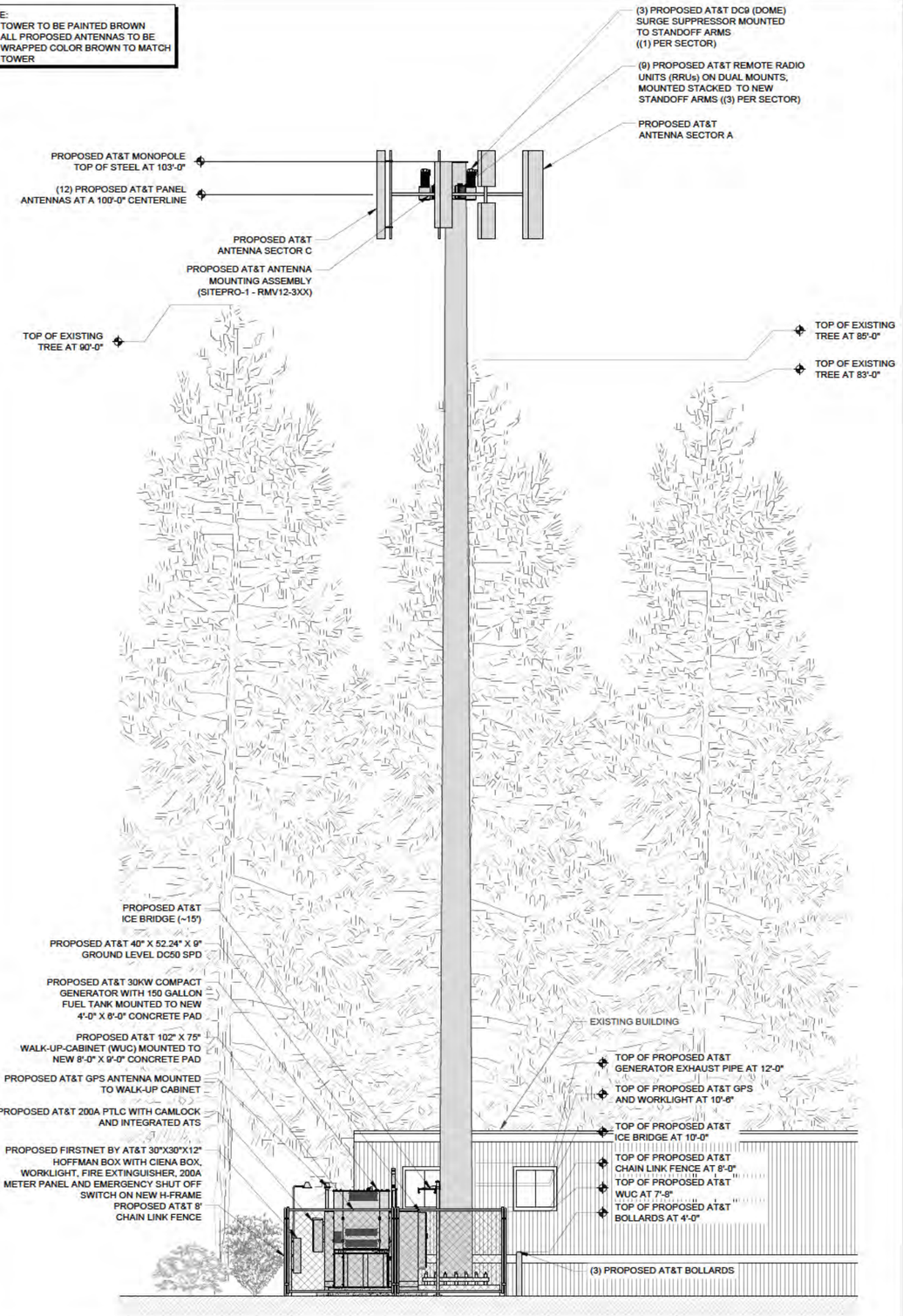
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SHEET TITLE:
ANTENNA LAYOUTS AND ANTENNA & EQUIPMENT SCHEDULE

SHEET NUMBER
A-3

NOTE:
- TOWER TO BE PAINTED BROWN
- ALL PROPOSED ANTENNAS TO BE WRAPPED COLOR BROWN TO MATCH TOWER

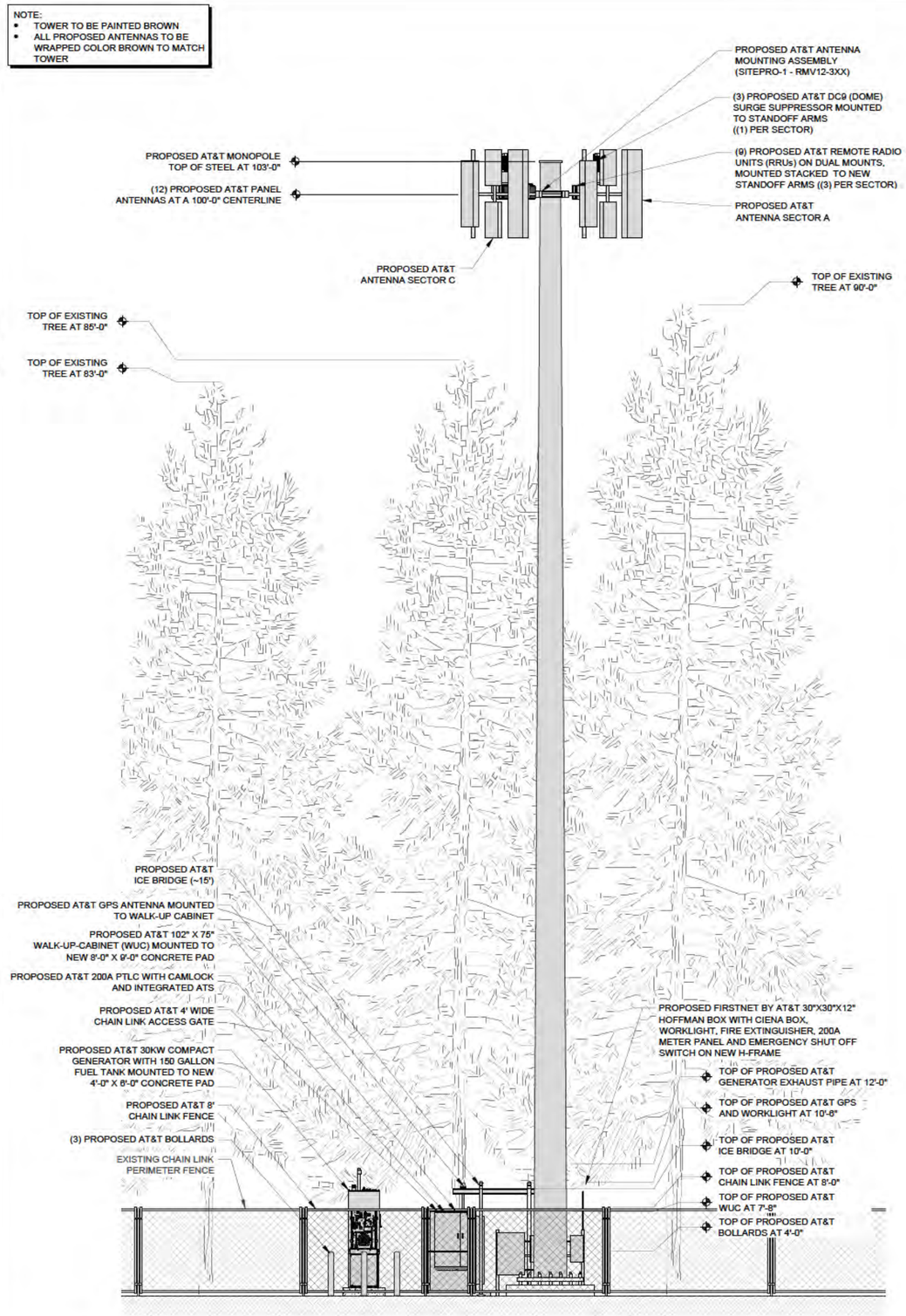


SOUTHEAST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 12'	1" = 6'

2

NOTE:
- TOWER TO BE PAINTED BROWN
- ALL PROPOSED ANTENNAS TO BE WRAPPED COLOR BROWN TO MATCH TOWER



NORTHEAST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 12'	1" = 6'

1

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VENDOR:

NextEdge

NEXTEDGE NETWORKS
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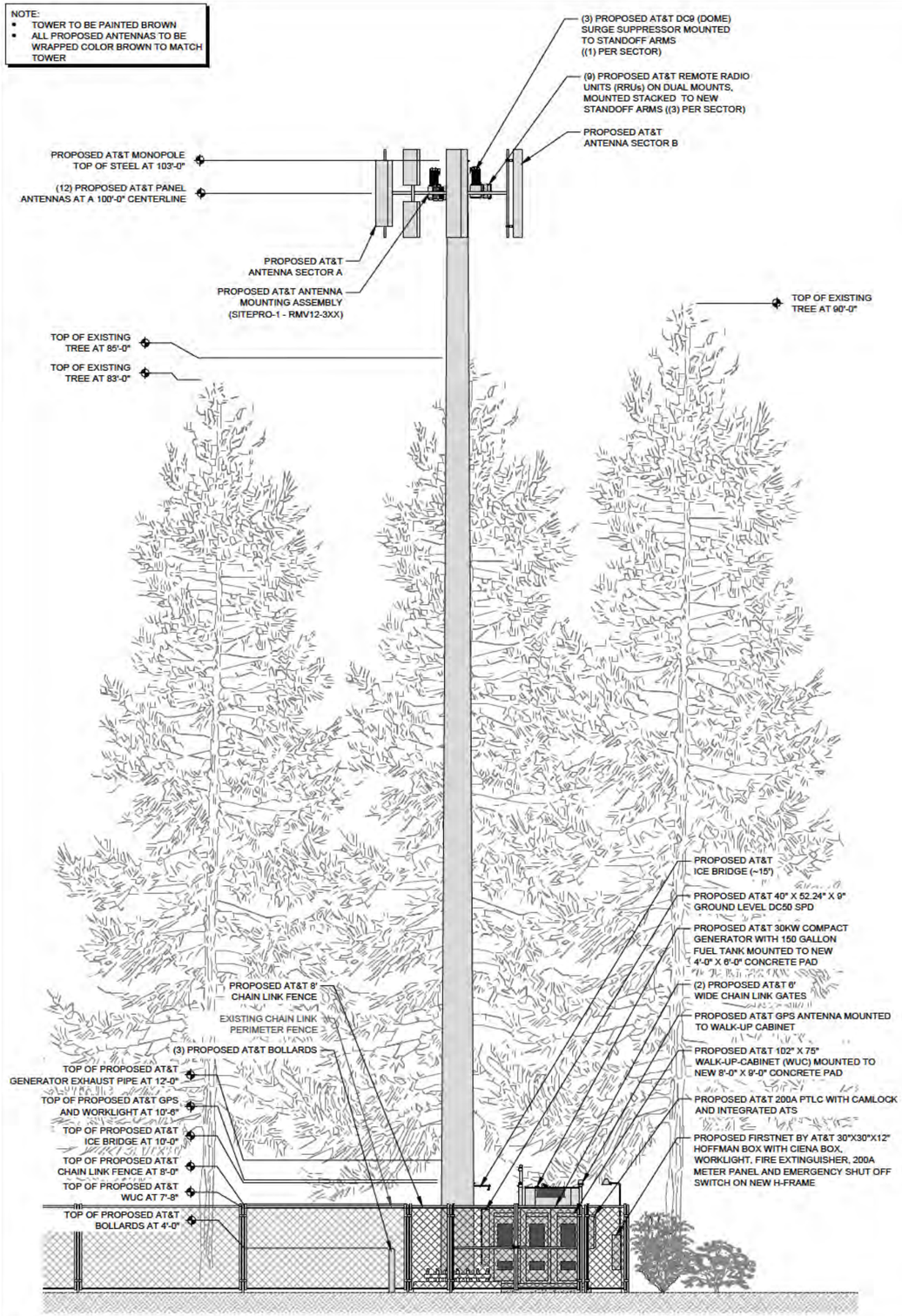
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SHEET TITLE:
NORTHEAST AND SOUTHEAST ELEVATIONS

SHEET NUMBER
A-4

NOTE:
- TOWER TO BE PAINTED BROWN
- ALL PROPOSED ANTENNAS TO BE WRAPPED COLOR BROWN TO MATCH TOWER

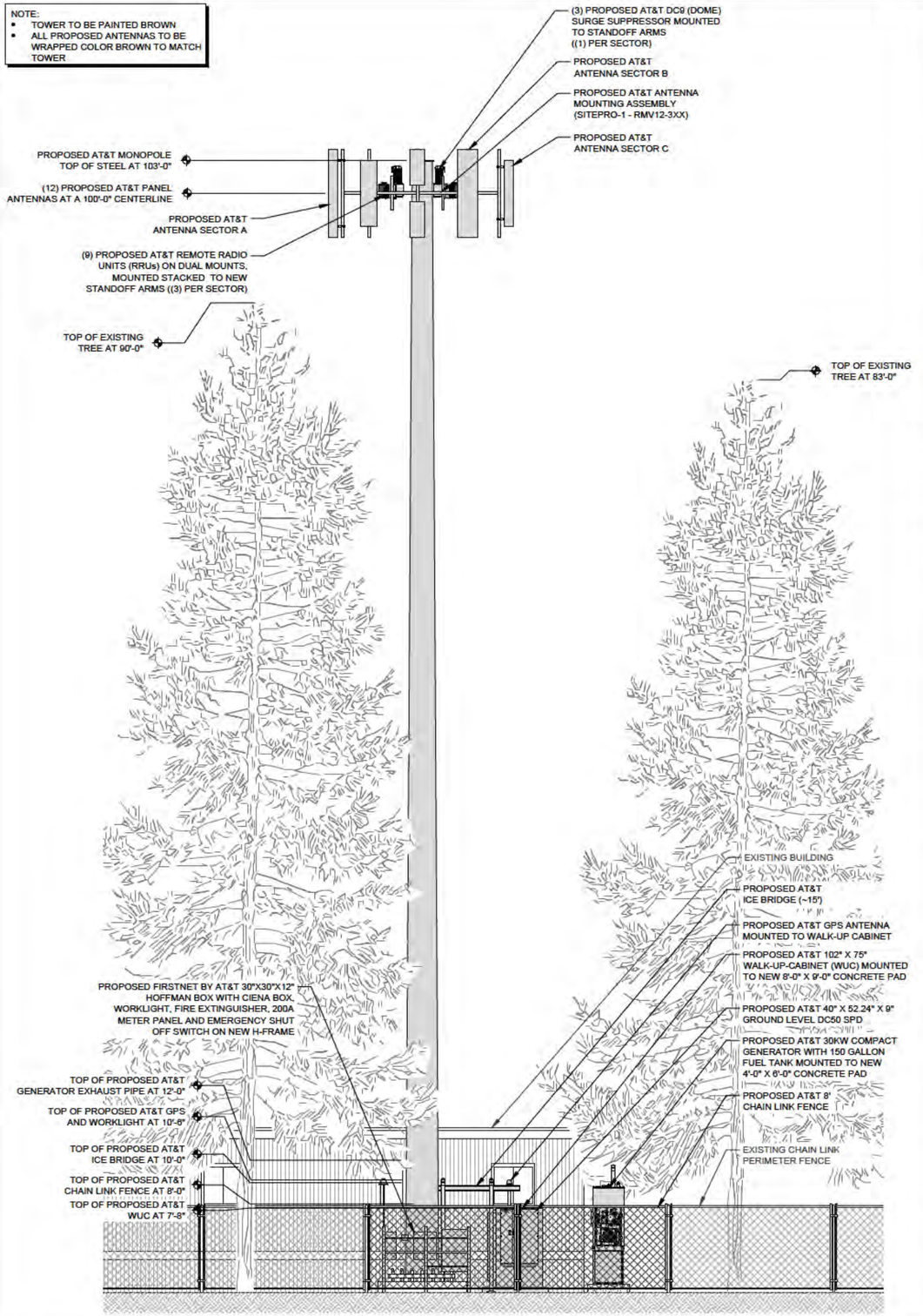


NORTHWEST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 10'	1" = 5'

2

NOTE:
- TOWER TO BE PAINTED BROWN
- ALL PROPOSED ANTENNAS TO BE WRAPPED COLOR BROWN TO MATCH TOWER



SOUTHWEST ELEVATION

11" X 17" SCALE	24" X 36" SCALE
1" = 10'	1" = 5'

1

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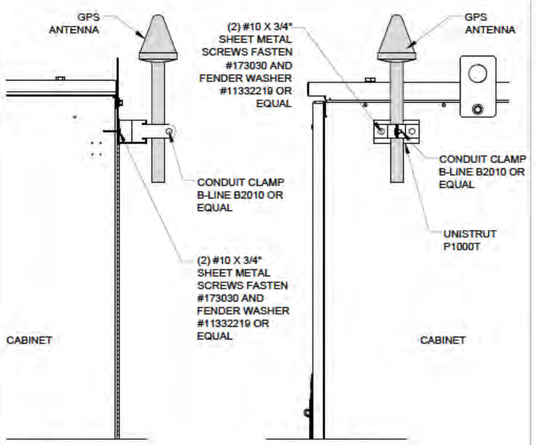
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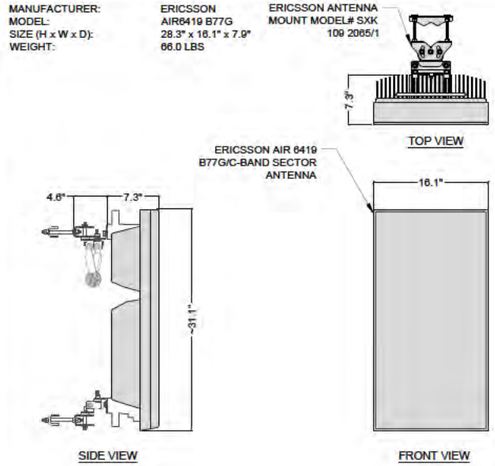
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SHEET TITLE:
SOUTHWEST AND NORTHWEST ELEVATIONS

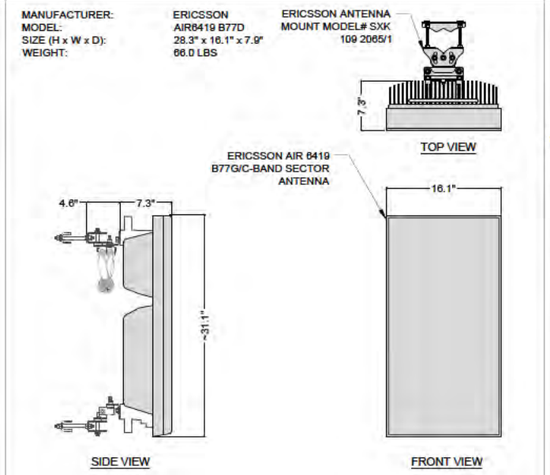
SHEET NUMBER
A-5



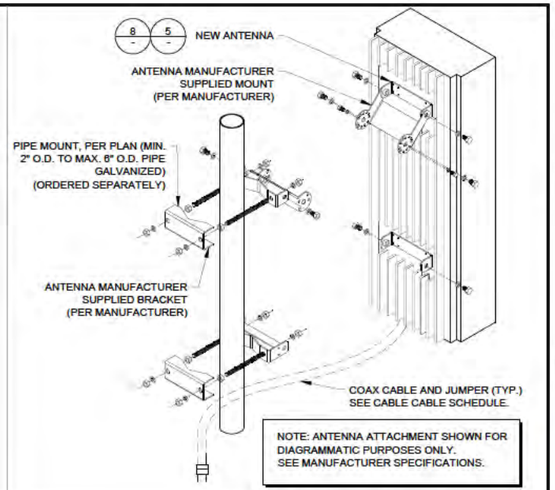
GPS ATTACHMENT — SCALE: NONE — 11



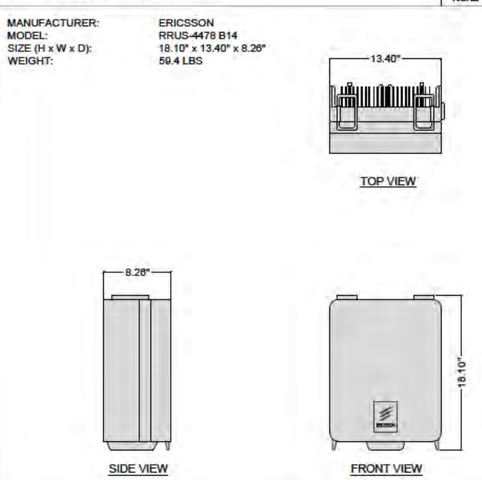
PANEL ANTENNA — SCALE: NONE — 8



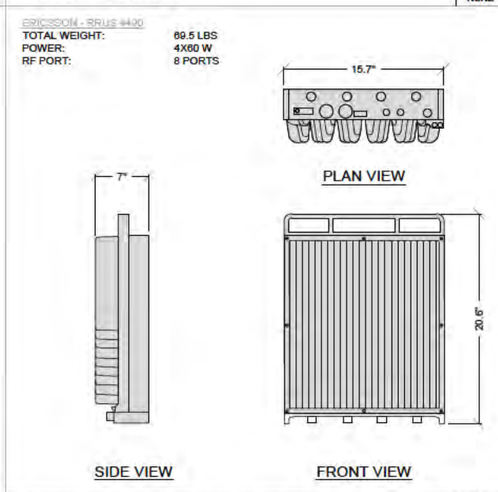
PANEL ANTENNA — SCALE: NONE — 5



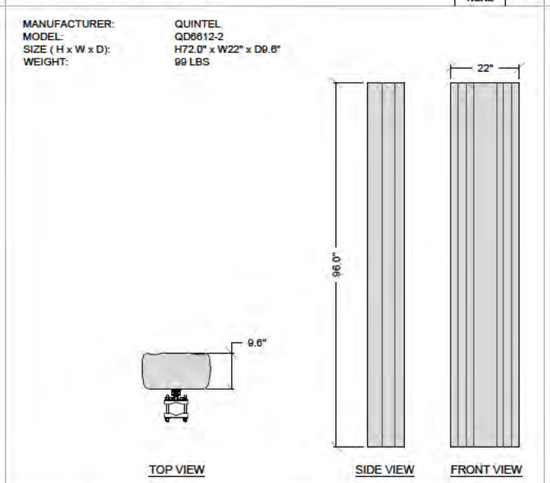
ANTENNA ATTACHMENT — SCALE: NONE — 2



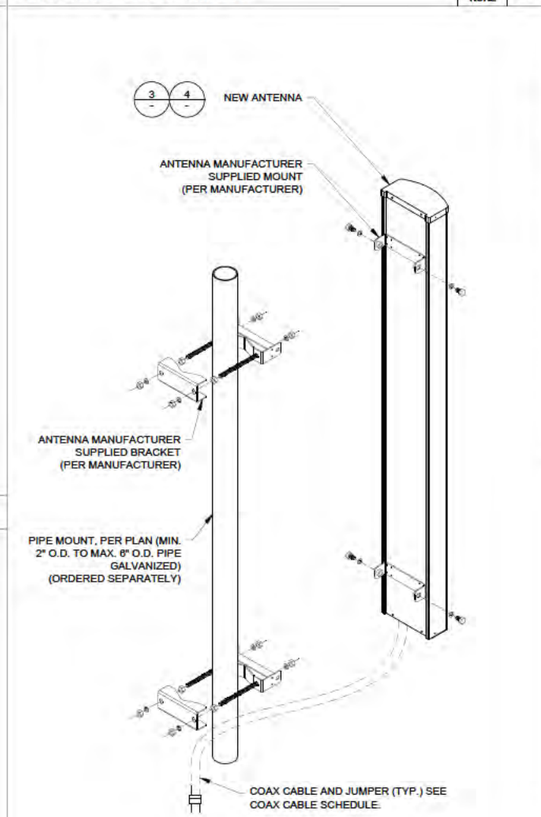
REMOTE RADIO HEAD (RRH) — SCALE: NONE — 10



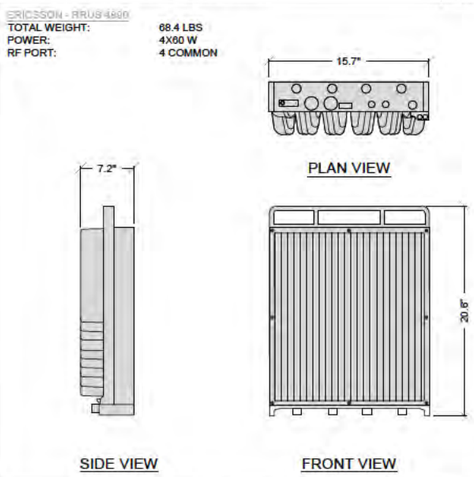
REMOTE RADIO HEAD (RRH) — SCALE: NONE — 7



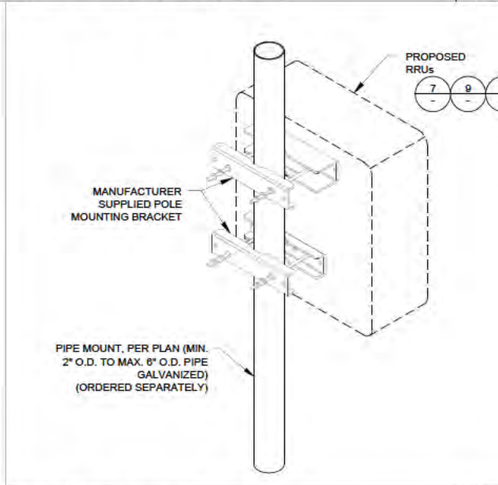
PANEL ANTENNA — SCALE: NONE — 4



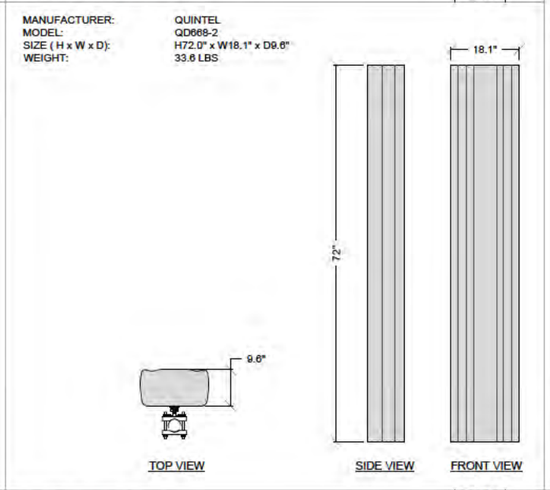
ANTENNA ATTACHMENT — SCALE: NONE — 1



REMOTE RADIO UNIT (RRU) — SCALE: NONE — 9



RRU ATTACHMENT — SCALE: NONE — 6



PANEL ANTENNA — SCALE: NONE — 3

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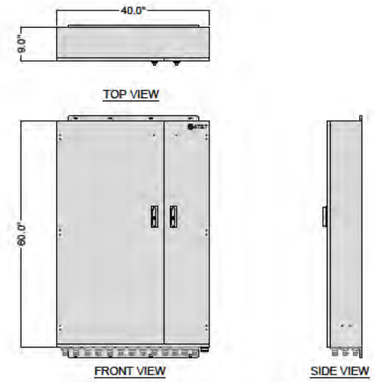
D-1

NOT USED | SCALE: NONE | 12

NOT USED | SCALE: NONE | 9

NOT USED | SCALE: NONE | 6

MANUFACTURER: RAYCAP
MODEL: DC50-48-60-96-50F
SIZE (H x W x D): 60.0" x 40.0" x 9.0"
WEIGHT: — LBS



DC50 SURGE SUPPRESSOR | SCALE: NONE | 3

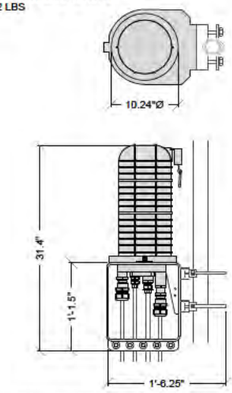
NOT USED | SCALE: NONE | 11

NOT USED | SCALE: NONE | 8

NOT USED | SCALE: NONE | 5

SPECIFICATIONS

MFG: RAYCAP
MODEL: DC9-48-60-24-8C-EV
SURGE PROTECTION SOLUTIONS
DIMENSIONS L18.28" X W10.24" X H31.4
WEIGHT: 26.2 LBS



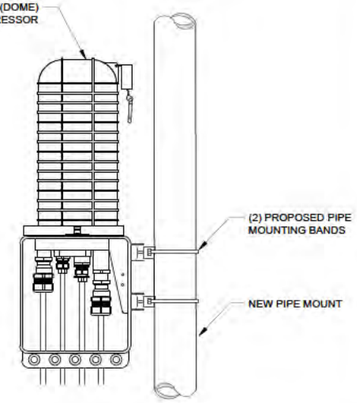
SURGE SUPPRESSION (SQUID) | SCALE: NONE | 2

NOT USED | SCALE: NONE | 10

NOT USED | SCALE: NONE | 7

NOT USED | SCALE: NONE | 4

PROPOSED AT&T DC9 (DOME) SURGE SUPPRESSOR (2/-)



SURGE SUPPRESSOR ATTACHMENT | SCALE: NONE | 1

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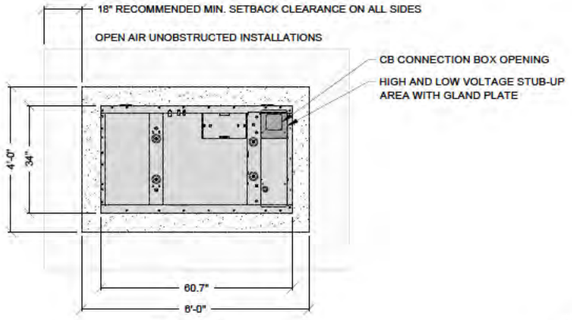
SHEET NUMBER

D-2

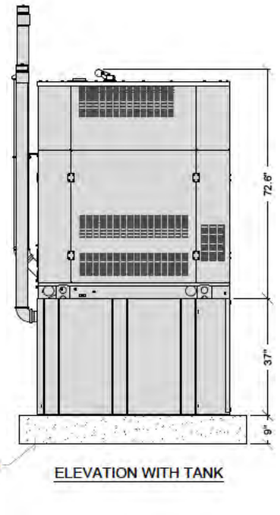
Notes:
1. CONTROL PANEL, (5 AMP BATTERY CHARGER INSIDE).
2. 120V, 20A GFCI, 15A OUTLET (OPTIONAL).
3. CONNECTION POINTS FOR CONTROL WIRES PROVIDED IN THE LOW VOLTAGE CONNECTION BOX (USE LOW VOLTAGE STUB-UP AREA).
4. BATTERY (12 VOLT NEGATIVE GROUND SYSTEM).
5. MAIN LINE CIRCUIT BREAKER (MLCB), AC LOAD LEADS.
   MAIN LINE CIRCUIT BREAKER INFORMATION:
   -SEE SPECIFICATION SHEET OR OWNERS MANUAL
   -ACCESSIBLE THROUGH CUSTOMER ACCESS ASSEMBLY DOOR ON REAR OF GENERATOR (DIMENSIONS MAY VARY DUE TO UNIT CONFIGURATION)
6. CENTER OF GRAVITY AND WEIGHT MAY CHANGE DUE TO UNIT OPTIONS. FOR WEIGHT AND CENTER OF GRAVITY DATA SEE SHEET 3
7. ENGINE SERVICE CONNECTIONS:
   INLET DIESEL = 1/4" NPT
   RETURN DIESEL = 1/4" NPT
   OIL DRAIN = 1/2" NPT
   RADIATOR DRAIN = 1/4" NPT
   FLEX PIPE OUTLET = 2" ID
   EXHAUST OUTLET = 2: ID

***** SEE GENERATOR SIZING GUIDE FOR FUEL PIPE SIZING TO SUIT APPLICATION *****

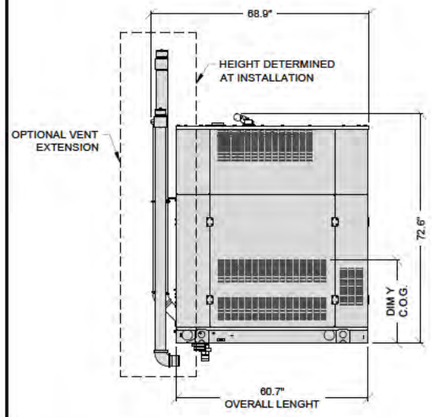
8. GENERATOR SET MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND DISCHARGE AIR FROM THE RADIATOR IS NOT RECIRCULATED.
9. BOTTOM OF GENERATOR SET MUST BE ENCLOSED TO PREVENT PEST INTRUSION AND RECIRCULATION OF DISCHARGE AIR AND/OR IMPROPER COOLING AIR FLOW.
10. EXHAUST SYSTEM MAXIMUM BACK PRESSURE = 10" H20 (ADDITIONAL).
11. REMOVE THE REAR ENCLOSURE COVER PANEL TO ACCESS THE STUB-UP AREAS AS FOLLOWS:
    -HIGHT VOLTAGE CONNECTION INCLUDING AC LOAD LEAD CONDUIT CONNECTION
    NEUTRAL CONNECTION, BATTERY CHARGER 120V AC (0.5 AMP MAX) CONNECTION.
    LOW VOLTAGE CONNECTION INCUDING TRANSFER SWITCH CONTROL WIRES.
12. BOLTS OR STUDS USED TO MOUNT UNIT TO PAD SHALL BE 5/8 - 11 GRADE 5.
13. ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICING. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE NFPA 37 AND NFPA 70 STANDARDS AS WELL AS ANY OTHER FEDERAL STATE, AND LOCAL CODES.
14. FOR INSTALLATIONS WITH AIRFLOW OBSTRUCTIONS ON ANY SIDE OF THE GENERATOR SEE SUPPORTING DOCUMENTATION FOR AIR FLOW CLEARANCE IN SUBMITTAL DOCUMENTS.



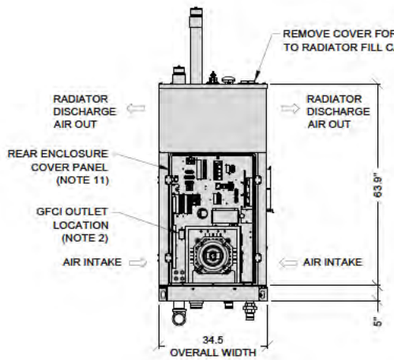
TOP VIEW



ELEVATION WITH TANK



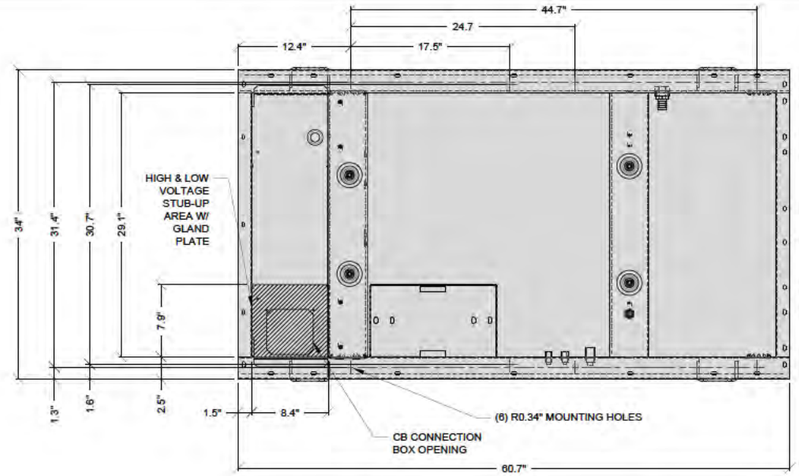
SIDE VIEW



REAR VIEW

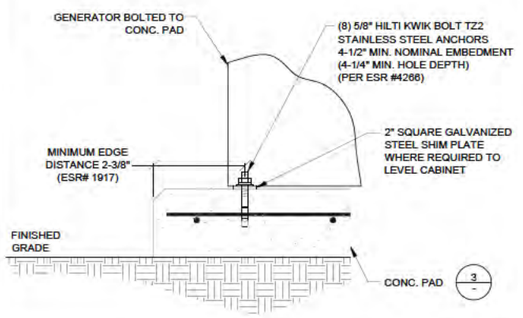
ENCLOSURE TYPE					
MODEL	VOLTAGE	WEIGHT	CENTER OF GRAVITY DIM X	CENTER OF GRAVITY DIM Y	CENTER OF GRAVITY DIM Z
SDC030	240V, 1Ø	1736.2 KG (1623 LBS)	784 (30.9)	765 (30.1)	444 (17.5)
SDC030	208V, 240V, 480V, 600V, 3Ø				

GENERAC SDC030 30KW GENERATOR WITH 150 GALLON TANK — SCALE: NONE — 5

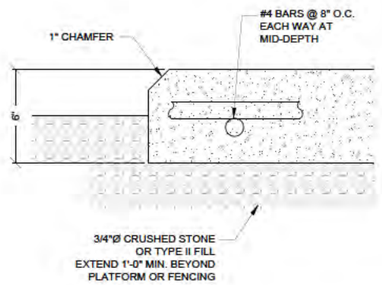


STUB-UP VIEW — SCALE: NONE

TANK FITTINGS
A. 4" NPT EMERGENCY VENT FITTING PER NFPA 30 WITH VENT CAPS (QTY 2)
B. 4" NPT FUEL FILL FITTING BUSHED TO 2" NPT WITH LOCKABLE FILL CAP AND 2" RISER
C. 2" NPT FUEL LEVEL GAUGE FITTING W/ DIRECT READING MECHANICAL GAUGE
D. 2" NPT NORMAL VENT FITTING WITH MUSHROOM VENT CAP AND 5" RISER
E. I/2" NPT FITTING FOR REMOVABLE ENGINE SUPPLY DIP TUBE (3/8" NPT FEMALE) WITH CHECK VALVE
F. I/2" NPT FITTING FOR REMOVABLE FUEL RETURN DIP TUBE (3/8" NPT FEMALE)
G. 2" NPT FUEL LEVEL SENDING UNIT
H. 2" NPT FITTING FOR OPTIONAL SWITCH (INSTALL 2"NPT PIPE PLUG)
I. 2" NPT FOR FUEL IN BASIN SWITCH
J. 2" NPT FITTING FOR OPTIONAL SWITCH
K. (INSTALL 2" NPT PIPE PLUG)

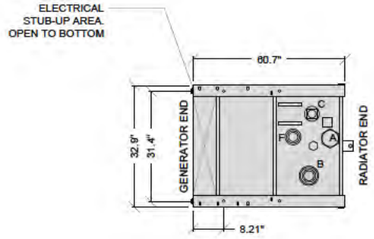


EQUIPMENT ANCHORAGE — SCALE: NONE — 4

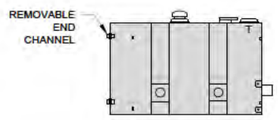


CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. REINFORCING STEEL SHALL CONFORM TO ASTM A615.

CONCRETE PAD — SCALE: NONE — 3

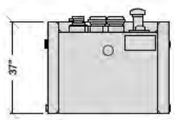


TOP VIEW



REAR VIEW

FUEL TANK	
TOTAL CAPACITY	150 GAL



SIDE VIEW (RADIATOR END)

NOTES:
STUB-UP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS CIRCUIT BREAKER, NEUTRAL AND CUSTOMER CONNECTION OPENING.

FOR CONCRETE PAD ATTACHMENT USE 3/4" HILTI KWIK BOLT TZ STAINLESS STEEL ANCHORS 4-5/16" MIN EMBEDMENT (4-1/2" HOLE DEPTH) ESR-1917

150 GALLON TANK DETAIL — SCALE: NONE — 1

PROJECT INFORMATION:
CCL05350
SF POLICE ACADEMY
350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR
at&t
5005 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:
NextEdge
NEXTEDGE NETWORKS
1355 WINDWARD CONCOURSE, SUITE 410
ALPHARETTA, GEORGIA 30005

AT&T SITE NO: CCL05350
PROJECT NO:
DRAWN BY: R. CRUZ
CHECKED BY: R. MARTINEZ
APPROVED BY: C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	11/18/25	100% ZONING	R.C.

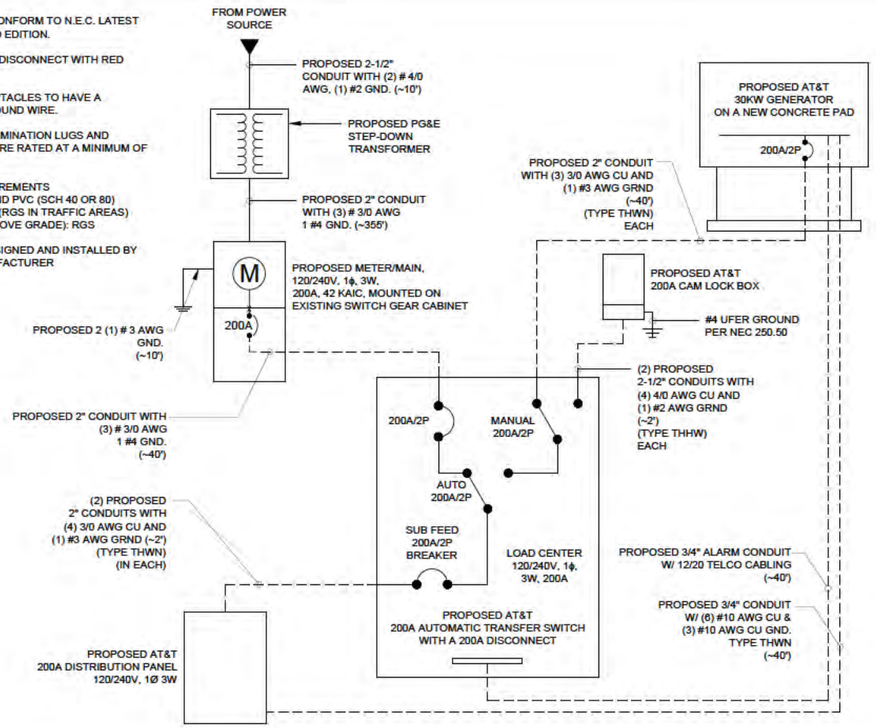
LICENSURE:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET TITLE:
GENERATOR DETAILS

SHEET NUMBER
D-3

NOTES:
1. ALL WORK TO CONFORM TO N.E.C. LATEST STATE ADOPTED EDITION.
2. LABEL SERVICE DISCONNECT WITH RED TAG
3. ALL GFCI RECEPTACLES TO HAVE A DEDICATED GROUND WIRE.
4. EQUIPMENT TERMINATION LUGS AND CONDUCTORS ARE RATED AT A MINIMUM OF 75°C.
5. CONDUIT REQUIREMENTS
   -UNDERGROUND PVC (SCH 40 OR 80)
   -INDOOR: EMT (RGS IN TRAFFIC AREAS)
   -OUTDOOR (ABOVE GRADE): RGS
6. LIGHTING IS DESIGNED AND INSTALLED BY SHELTER MANUFACTURER



SINGLE LINE DIAGRAM

SCALE: NONE | 4

1. UTILITY POINTS OF SERVICE AND WORK/MATERIALS SHOWN ARE BASED UPON PRELIMINARY INFORMATION PROVIDED BY THE UTILITY COMPANIES AND ARE FOR BID PURPOSES ONLY.
2. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS AND CONSTRUCT TO UTILITY COMPANY ENGINEERING PLANS AND SPECIFICATIONS ONLY. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULL ROPES, CABLES, PULL BOXES, CONCRETE ENCASEMENT OF CONDUIT (IF REQUIRED), TRANSFORMER PAD, BARRIERS, POLE RISERS, TRENCHING, BACK FILL, PAY ALL UTILITY COMPANY FEES AND INCLUDE ALL REQUIREMENTS IN SCOPE OF WORK.

ELECTRICAL CERTIFICATES

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATINGS INDICATED FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED VOLTAGE DROP CALCULATIONS AND ALL BRANCH CIRCUITS AND FEEDERS COMPLY WITH NEC (LISTED ON T1) ARTICLE 210,19(A)(1) FPN NO. 4.

ELECTRICAL NOTES

SCALE: NONE | 3

PANEL NAME:	X	BUS:	225	P VOLTAGE:	120/240, 1Ø, 3W	MOUNTING:	PEDESTAL
LOCATION:	R.O.W.	MAIN C.B.:	200	AIC RATING:	42,000	TYPE:	MAIN/SUB

CIRCUIT TYPE: N = NON-CONTINUOUS C = CONTINUOUS

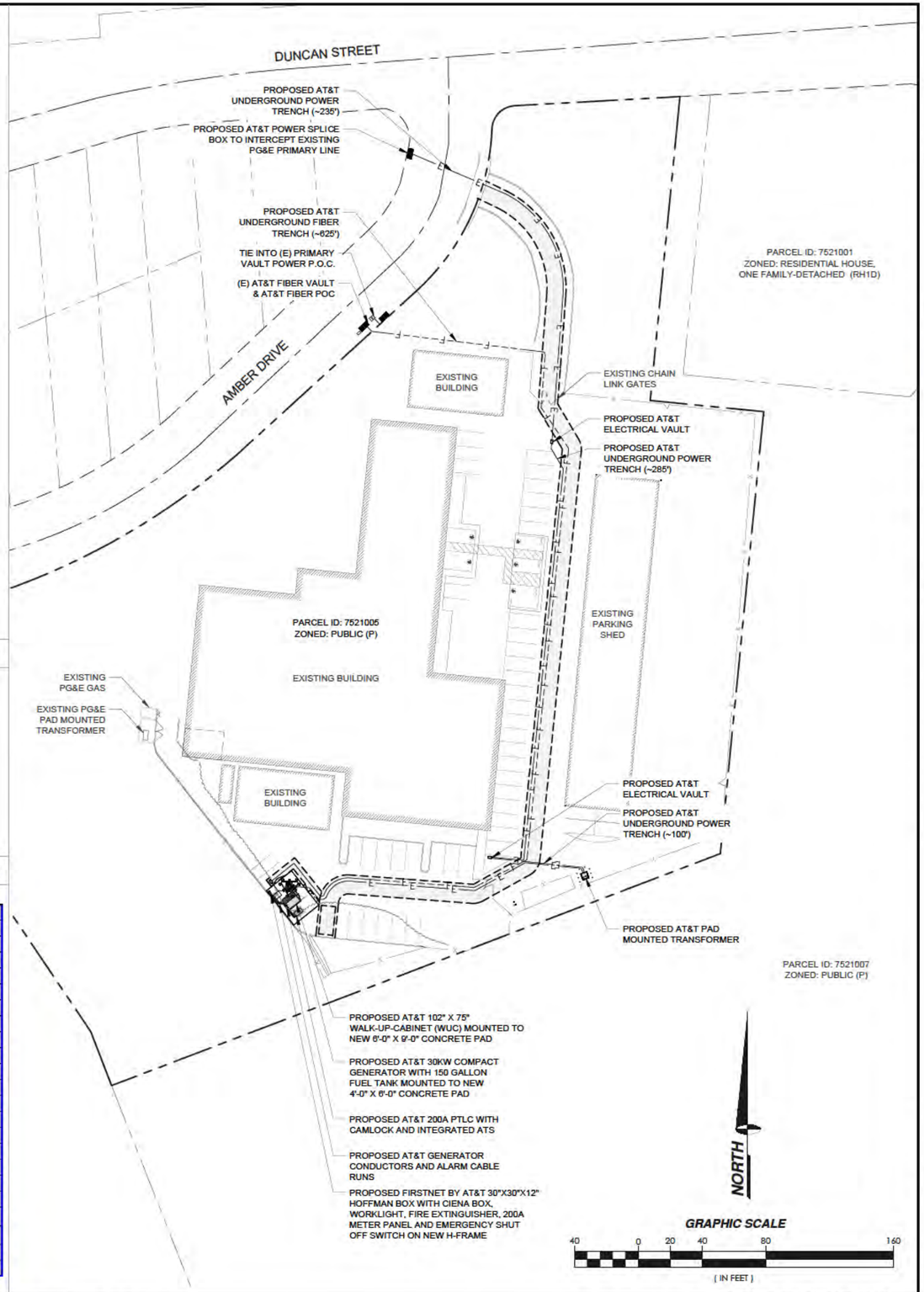
CKT #	TY	TRP	POL	DESCRIPTION	ØA	ØB	ØA	ØB	DESCRIPTION	TRP	POL	TY	CIR #
1	N	30		SPARE	-		560		LIGHT & RECEPACLE	20	1	N	2
3	N		2			-		360	BATTERY CHARGER	20	1	N	4
5	N	25		HVAC	1,400		480		BATTERY HEATER	20	1	N	6
7	N		2			1,400		2,150	RECTIFIER # 11 & 12	30		N	8
9	N	20	1	GFCI	180		2,150				2	N	10
11	N	30		RECTIFIER # 1 & 2		2,150		2,150	RECTIFIER # 13 & 14	30		N	12
13	N		2		2,150		2,150				2	N	14
15	N	30		RECTIFIER # 3 & 4		2,150		2,150	RECTIFIER # 15 & 16	30		N	16
17	N		2		2,150		2,150				2	N	18
19	N	30		RECTIFIER # 5 & 6		2,150		-				N	20
21	N		2		2,150		-					N	22
23	N	30		RECTIFIER # 7 & 8		2,150		-				N	24
25	N		2		2,150		-					N	26
27	N	30		RECTIFIER # 9 & 10		2,150		-				N	28
29	N		2		2,150		-					N	30

NOTES:

PHASE TOTALS	ØA =	19,820	ØB =	18,960	TOTAL CONNECTED VA:	38,780.00
					PANEL DEMAND KVA	38.78
					PANEL DEMAND AMPS:	161.58
					RGEST Ø DEMAND AMPS:	165.17

PANEL SCHEDULE

SCALE: NONE | 2



UTILITY ROUTING

11" X 17" SCALE	24" X 36" SCALE
1" = 80'	1" = 40'

1

PROJECT INFORMATION:

CCL05350
SF POLICE ACADEMY

350 AMBER DRIVE
SAN FRANCISCO, CALIFORNIA 94131

PREPARED FOR

at&t

5005 EXECUTIVE PARKWAY
SAN RAMON, CALIFORNIA 94583

VENDOR:

NextEdge
NEXTEDGE NETWORKS
1355 WINDWARD CONCOURSE, SUITE 410
ALPHARETTA, GEORGIA 30005

AT&T SITE NO:	CCL05350
PROJECT NO:	
DRAWN BY:	R. CRUZ
CHECKED BY:	R. MARTINEZ
APPROVED BY:	C. WENER

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	01/30/24	90% ZONING	R.C.
0	11/18/25	100% ZONING	R.C.

LICENSURE:

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SHEET TITLE:
UTILITY ROUTING, PANEL SCHEDULE, 1-LINE DIAGRAM & NOTES

SHEET NUMBER
E-1

Attachment B
Geotech Letter

November 26, 2025

Next Edge Networks
On behalf of AT&T Mobility, LLC

RE: Preliminary Geological Review for Landslide Susceptibility
Proposed AT&T Mobility New Site Build 104-foot Tall Tower
AT&T ID: CCL05350 / 350 Amber Drive San Francisco, CA
GE²G Project # 311965

Geist Engineering and Environmental Group, Inc. (GE²G), appreciates the opportunity to have assisted Next Edge Networks by having a Preliminary Geological Review for Landslide Susceptibility report completed for the proposed above listed proposed AT&T Mobility undertaking. This is preliminary review is appropriate as design or exact tower location conditions can change during the planning approval process. It is standard practice to conduct a comprehensive geotechnical investigation at the building permit stage.

Executive Summary:

- Based on review of the prior site parcel 1999 report and summary of previous reports included in the 1999 report, documented distress to the existing building has been attributed to settlement of the underlying fill soils and was not caused by slope instability.
- As summarized in the previous geotechnical report reviewed, previous studies have concluded that slope instability is not a concern for the proposed tower. The documented settlement/movement of the existing building has been attributed by other consultants to have occurred due to vertical compression of saturated fill soils.
- Siting a 104-foot tower and accompanying equipment above a mapped landslide zone is appropriate provided a geotechnical investigation is performed including recommendations to address site specific conditions.
- It is routine to build on fill and the design recommendations in the geotechnical investigation are standard and adequately address seismic and soil stability concerns.
- From a technical geotechnical viewpoint, the proposed location is suitable for the proposed foundation to support a 104-foot tall monopole. A Geotechnical Investigation will need to be completed at the building permit stage, including subsurface exploration by test boring method, be performed to evaluate the existing subsurface conditions and provide final geotechnical design recommendations for support of the planned tower.

If you have any inquiries or would like any additional information, please contact me at (510) 610-1453, or sgeist@geistenvironmental.com.

Sincerely,

Stephen Geist, President,
Geist Engineering and Environmental Group, Inc.

Attached:
Completed Preliminary Geological Review for Landslide Susceptibility Review by Salem Engineering Group, Inc. for AT&T: CCL05350, with recommendations as competed by Dean B. Ledgerwood II, Professional Engineer (PE) 94395/ Professional Geologist (PG) 8725 / Certified Engineering Geologists (CEG) 2613 Geotechnical Manager dated November 24, 2025

SALEM
engineering group, inc.

4729 W. Jacquelyn Avenue
Fresno, California 93722
(559) 271-9700 Office
(559) 275-0827 Fax

November 24, 2025 Project 5-225-1040

Mr. Stephen Geist
Geist Engineering and Environmental Group
4200 Park Boulevard, 149
Oakland, California

SUBJECT: Preliminary Geological Review for Landslide Susceptibility
Proposed 104' AT&T Communications Tower Site
Site ID: CCL05350 SF Police Academy
350 Amber Drive
San Francisco, CA

Dear Mr. Geist,

At your request and authorization, SALEM Engineering Group, Inc. (SALEM) has prepared this preliminary geologic review for landslide susceptibility as it pertains to the subject site and the proposed AT&T 104' monopole. This letter has been prepared based on SALEM's review of the project plans provided, review of available public geologic data, and site reconnaissance performed by SALEM's Engineering Geologist.

The findings of this preliminary review do not include a subsurface investigation or slope stability analysis. The intent of this report was to provide a geologic review of the potential for landslide/slope instability based on document review, review of aerial imagery, and surficial observations.

Executive Summary

- Construction of the planned 104' monopole tower and supporting equipment is considered feasible. A site specific geotechnical investigation within the limits of the planned tower should be performed. The future geotechnical investigation would include recommendations to adequately address support of the tower within existing fills and will address seismic and soil stability concerns in accordance with current industry standards and requirements of the current California Building Code.
- The subject tower area is not located in an area identified as having known landslide hazard by CGS or the City of San Francisco. CGS and the City of San Francisco identify a potential landslide hazard zone within a portion of the descending slope, approximately 80 west of the tower location. The future geotechnical investigation should include analysis and recommendations for the planned improvements to be supported within the existing fills and **not** increase risk for instability of the descending slope. Provided the tower is designed and constructed in accordance with the recommendations of the future geotechnical report, constructing the 104' tower and equipment up-slope of the mapped landslide hazard zone would not be a concern.
- Previous geotechnical reports provided for review summarized that slope instability is not a concern within the site.
- Based on review of the previous geotechnical reports provided at the time of this letter, documented distress to the existing SFPD Academy Building has been attributed to settlement/compression of the underlying fill soils and not by slope instability;
- From a Geotechnical and Geologic perspective, the proposed tower location and plans to support a 104' tall monopole tower would not be anticipated to increase risk for slope instability;

Planned Construction

It is our understanding that the project will include construction of a 104' an Francisco Police Academy facility (see Figure No. 1). The tower is planned to be located near the southern edge of an existing paved area, near the top of an existing slope (see Figure No.1). The top of the slope is approximately 250 feet east (measured horizontally) of the western property line. Based on review of available topographic information, the existing slope is estimated to have a repose of approximately 5 horizontal (H) to 1 vertical (V). The lease site area is relatively flat and level and is located approximately 10 to 12 feet horizontally from the top of the existing slope. It is anticipated that the monopole tower will be supported on cast-in-drilled-hole (CIDH) pile foundations. Based on our experience with tower projects, the foundation loads are expected to be light to moderate, with foundation design governed by lateral loading.

Site History

Based on review of available historical aerial imagery from UC Santa Barbara Historical Aerial Imagery Library (https://www.library.ucsb.edu/geospatial/aerial-photography) the surrounding area including the subject site was graded and surrounding area was developed during the early to mid-1960s. Aerial imagery dated July 29, 1946 depicts the area of the SFPD parcel as generally open land, and appears to gently slope to the west/southwesterly direction. Aerial imagery, dated July 10, 1963, indicates large mass grading was occurring on the property, including at and around the proposed tower location. An aerial image, dated May 11, 1965, depicts the tower site and overall building areas of the site as relatively flat. The existing church, located northwest of the site, had been constructed (not previously depicted in the 1963 image). Slope terraces descending to the southwest were noted. A 1993 aerial image published on Google Earth, depicts the tower site and subject property in similar condition to the present day condition.

A previous Geotechnical Investigation Report, prepared by Trans Pacific Geotechnical Consultants, Inc., dated January 18, 1999 was provided to SALEM for review. The previous report was noted to be un-signed and marked Draft. The previous report had been prepared to address proposed remodeling and seismic upgrades to the San Francisco Police Academy building. Based on review of the previous report, the 1999 report indicated that previous geotechnical investigations by Woodward Clyde Sherard and Associates were prepared for the original Diamond Heights Elementary School (January 29, 1965), a second report addressing conditions of walls and floor slab (March 21, 1969), and a third report addressing settlement in the south wing of Diamond Heights Elementary School (June 7, 1976). In addition, the 1999 report included review of a July 15, 1977 report by Harding Lawson Associates addressing additional movements to the Diamond Heights Elementary School building. These reports have not been made available to SALEM to review at this time. According to the 1999 report, previous reports summarize a history of settlement that occurred to the existing building. The Woodward Clyde Sherard (WCS) reports were reported to summarize settlement of the existing building at rate of about 1.5 inches per year. The WCS reports documented 8 inches of vertical deformation at the south end of the building, and horizontal deformation of fill at Christopher Park (downslope of the SFPD site) of about 1 inch. Reportedly, the WCS reports concluded "*that the entire mass of fill placed to develop Crhistopher Park and the school property was moving along the original ravine slopes*". The Harding Lawson Associates (HLA) report prepared in 1977 included an independent investigation of the movements of the building. According to the 1999 report, the HLA report summarized several theories of possible movement, including noting that there as a documented 6 year period between 1967 and 1973 where no settlement occurred. It was summarized that the HLA report had correlated the settlement occurred following periods of higher than normal rainfall. The HLA

report also reportedly summarized that the existing fill soils had compaction results ranging between 86 and 98 percent (averaging 92 percent). The HLA report indicated the predicted settlement rate would be around 1.5 to 2 inches per year and a total of 11 inches of settlement within the 2 story wing of the building was measured as of 1977. The 1999 report reported that HLA concluded ""*The site is stable against a large scale landslide and continue to be used safely for a school", however the two story wing was considered to be potentially unsafe during an earthquake and should not be reoccupied*."

According to the 1999 report, "*On March 13, 1979 Harding Lawson Associates issued a final report addressing the settlement monitoring on the site. There was slight lateral movement of the fill but no indications to suggest a potential landslide. Settlement was still occurring within the two story wing.*"

The 1999 report included subsurface exploration extending to depths of about 31.5 feet BSG. The borings reportedly encountered medium stiff to stiff gravelly clay with rock fragments to depths of 18 to 20 feet BSG and sandy lean clay underlain by medium dense wet clayey gravel with rock fragments to 20 feet BSG. These materials were underlain by medium dense clayey gravel and sand to the maximum depths explored of 31.5 feet BSG. The test borings and subsurface soils description did not clearly distinguish between fills and native materials, however, the report later states that fills on the order of 35 to 45 feet thick may be present in the northern portion of the building and 60 to 90 feet thick in the southern portion of the building.

Based on review of the 1999 report and summary of previous reports included in the 1999 report, documented distress to the existing building has been attributed to settlement of the underlying fill soils and was not caused by slope instability.

SALEM has not been provided with any other historic documentation pertaining to the existing construction or previous reports documenting historic cases of instability within the site. A document review request was made to the City of San Franisco Record Department, however, no information had been provided at the time of this report. If available, SALEM should be provided with any available documents for relating to the history of the property and/or ground instability.

Observations of the Property by Engineering Geologist

On November 18, 2025, Mr. Dean Ledgerwood CEG #2613 (SALEM Engineering Geologist) walked the property, including the proposed lease area and adjacent slope, to observe visible exterior surficial conditions potentially related to ground instability (such as potential landslides).

An existing two story building, with an approximate plan view area of about 28,000 square feet, occupies the central portion of the property. The building construction appeared to include concrete masonry unit (CMU) wall construction with concrete pilasters supporting roof loads. The exterior walls of the existing building appeared to be in good condition. No cracking of the CMU walls, concrete columns, or concrete stem walls was noted during our site reconnaissance. During our site reconnaissance, Mr. Joel Hornstein (SFPD) indicated that he had no knowledge of any previous distress to the building during the past approximately 20 years that he has been working at the site. However, it should be noted Mr. Hornstein mentioned the interior floor in his office did not appear to be level. Mr. Hornstein's comment regarding the floor surface appearing out of level corresponds with our understanding of the historic performance of

the building summarized in the 1999 report. Our site reconnaissance did not include review of the interior of the building.

The areas surrounding the building included asphaltic concrete pavements, with a parking canopy located east of the building. The pavements were noted to be in poor condition with potholes, alligator cracking, and raveling noted throughout. It is our understanding that no pavement repairs or rehabilitation activities have been performed over at least the past 20 years. The pavement condition was considered appropriate considering the age of the pavements. An existing transformer pad with CMU wall enclosure was noted at the top of the slope, east of the existing building. An asphaltic concrete curb was noted at the western edge of the pavements, at the top of a graded southwest facing slope. SALEM did not observe any signs of distress to the curbline or equipment enclosure.

Based on review of the City of San Francisco Elevation Contours Website (https://data.sfgov.org/Energy-and-Environment/Elevation-Contours/rnbg-2qxw/data), the southwest facing slope, was noted to be about 150+ feet high, and descends to the southwest away from the proposed tower area. The slope is estimated to have a repose of approximately 5H to1V. The western property line is about mid-slope, located approximately 250 feet west of the top of slope (developed area). A public asphaltic concrete walking path and asphalt lined swale were noted near the western property line. The existing walking path and asphalt lined swale were noted to be in good condition and did not show visible signs of distress. The slope is covered with mature trees and native grasses. The tree trunks were generally noted to be vertical in orientation and had heights estimated to be greater than 60 to 80 feet. The slope face was generally uniform with no evidence of slope distress/movement. Near the top of the slope, some green grassy vegetation was noted. The greener vegetation was noted to be within an area where surface stormwater runoff was directed to from the pavements at the SFPD site.

Geologic Map and Seismic Hazard Map Document Review

Based on the Preliminary Geologic Map of the San Francisco South 7.5' Quadrangle and part of the Hunters Point 7.5' Quadrangle, the site appears to mapped in Colma Foundation (Qc). Considering our review of historical aerial imagery, the western portion of the site appears to include fill soils placed during the 1960s.

Based on review of the CGS Seismic Zone Hazard Maps and San Francisco Seismic Hazard Zones mapping, the western portion of the parcel is mapped within a mapped Landslide Hazard Zone; however, the area of the planned tower is not located within the mapped landslide hazard zone. The mapped landslide hazard zone is noted to be approximately 80 feet west of the planned tower location.

Based on review of the Associated of Bay Area Governments (ABAG) Hazard View Map, the area of the proposed tower lease and entire SF Police Academy parcel is within an area mapped as "flat land" designation for potential Rainfall Induced Landslides. ABAG defines "flat land" as areas unlikely to have a landslide event.

Conclusions

Based on our observations of the exterior surficial conditions and exterior of the existing building, no visible evidence of previous slope movement/landslides was noted during our November 2025 site observations conducted by an Engineering Geologist.

It was noted that a portion of the SFPD parcel site is located within a mapped landslide hazard zone. However, the area of the planned tower is not located within the mapped landslide hazard zone. Therefore, the area of the planned lease area is not considered to be within an area mapped by local or state jurisdiction as having known potential for landslide hazards.

As summarized in the previous geotechnical report reviewed, previous studies have concluded that slope instability is not a concern for the site. The documented settlement/movement of the existing building has been attributed by other consultants to have occurred due to vertical compression of saturated fill soils.

Based on our understanding of the previous grading, fills with thicknesses greater than 40 feet may be present within the site, including the area of the planned tower. It is recommended that a Geotechnical Investigation, including subsurface exploration by test boring method, be performed to evaluate the existing subsurface conditions and provide geotechnical design recommendations for support of the planned tower.

The planned tower is anticipated to be supported using a CIDH pile foundation. Cellular tower monopole foundation loads are generally considered to be light to moderate. The cellular tower vertical loads supported on CIDH pile foundations would evenly distribute the load stresses and therefore, would not be anticipated to impart significant increased stresses to the existing fills. Thus, the tower structure would not be anticipated to result in an increased potential for additional static settlements to occur outside the tower lease area.

Construction of the proposed tower improvements would not be anticipated to increase surface water drainage over or into the existing western slope area. Also, the tower construction would not result in a potential for increased saturation of the fills.

Provided the tower foundations are designed based on the findings of a comprehensive Geotechnical Investigation, it is our opinion that the proposed cellular tower project would not pose an increased risk to slope instability, nor would the tower structure increase the potential for compression/settlement of the existing fills.

CLOSING

If site conditions change due to natural processes or human intervention on the property or adjacent to the site, or changes occur in the nature or design of the project, or if there is a substantial time lapse between the submission of this report and the start of the work at the site, the conclusions and recommendations contained in our report will not be considered valid unless the changes are reviewed by SALEM and the conclusions of our report are modified or verified in writing. This report did not include subsurface investigation. A comprehensive geotechnical investigation, including subsurface borings, should be performed to provide Geotechnical Design recommendations for the planned construction. SALEM has prepared this report for the exclusive use of the owner and design consultants.

This report has been prepared in accordance with generally accepted geologic practices. No other warranties, either express or implied, are made as to the professional advice provided under the terms of our agreement and included in this report.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (559) 271-9700.

Respectfully submitted,
SALEM ENGINEERING GROUP, INC.

Dean B. Ledgerwood II, PE, PG, CEG
Geotechnical Manager
PE 94395 / PG 8725 / CEG 2613







SITE PLAN	SCALE: 1" = 80'	DATE: NOV 2025	SALEM engineering group, inc.
PROPOSED CELL TOWER 350 AMER DRIVE SAN FRANCISCO, CALIFORNIA	DRAWN BY: DL	APPROVED BY: DL	
	PROJECT No. 5-225-1040	FIGURE NO. 1	

Attachment C
Radio Frequency Statement

AT&T Mobility Radio Frequency Statement
350 Amber Dr., San Francisco, CA
AT&T Site ID CCL05350

AT&T has experienced an unprecedented increase in mobile data use on its network since the release of the iPhone in 2007. AT&T estimates that in the decade following introduction of the iPhone in 2007, mobile data usage has increased 470,000% on its network. AT&T forecasts its customers' growing demand for mobile data services to continue. In 2022, wireless data traffic increased to 73.7 trillion megabytes, a 38% increase from 2021, and is expected to increase 58 gigabytes per smartphone per month on average (4x current usage) by 2028. The increased volume of data travels to and from customers' wireless devices and AT&T's wireless infrastructure over limited airwaves — radio frequency spectrum that AT&T licenses from the Federal Communications Commission.

Spectrum is a finite resource and there are a limited number of airwaves capable and available for commercial use. Wireless operators license those airwaves from the FCC. To ensure that service quality, AT&T must knit together its spectrum assets to address customers' existing usage and forecasted demand for wireless services, and it must use its limited spectrum in an efficient manner.

AT&T uses high-band (i.e., 6 GHz and higher), mid-band (i.e., C-Band spectrum, 2300 MHz, 2100 MHz, and 1900 MHz), and low-band (i.e., 850 MHz and 700 MHz) spectrum to provide wireless service. Each spectrum band has different propagation characteristics and signal quality may vary due to noise or interference based on network characteristics at a given location. To address this dynamic environment, AT&T deploys multiple layers of its licensed spectrum and strives to bring its facilities closer to the customer. The proposed new wireless communications facility is located south of the San Francisco Police Academy building at 350 Amber Dr., San Francisco, CA (the "Property"). The site is needed to close a coverage gap in 4G LTE service in an area roughly bordered by the intersection of Amber Dr. and Turquoise Way to the north, O'Shaughnessy Blvd. to the south and west, and Diamond heights Blvd. to the east. This gap area includes numerous homes, businesses in the Diamond Heights Shopping Center, well-traveled roads, Glen Canyon Park, St. Nicholas Antiochian Orthodox Church and other points of interest in the vicinity.

The service coverage gap is caused by inadequate infrastructure in the area. AT&T currently has existing sites in the broader geographical area surrounding the Property but, as existing coverage map illustrates, these existing sites do not provide sufficient 4G LTE service in the gap area. Wireless telecommunications is essentially a line-of-sight technology, and AT&T's antennas need to be high enough to propagate an effective signal throughout the gap area. To meet its coverage objectives for this gap area, AT&T proposes a the proposed wireless communications facility. Denial of this proposed facility would materially inhibit AT&T's ability to provide and improve wireless services in this portion of the city.

The facility at the Property will help to close the gap in coverage and help address rapidly increasing data usage driven by smart phone and tablet usage. This site is part of an effort to fully deploy 4G LTE technology in the area. Specifically, the proposed facility will close this service coverage gap and provide sufficient 4G LTE coverage for AT&T customers in the affected area. LTE technology also offers low latency, or the processing time it takes to move data through a network, such as how long it takes to start downloading a webpage or file once one has sent the request. Lower latency helps to improve the quality of personal wireless services. What's more, LTE uses spectrum efficiently, creating more space to carry data traffic and services and to deliver a better overall network experience.

It is important to understand that service problems can and do occur for customers even in locations where the coverage maps on AT&T's "Coverage Viewer" website appear to indicate that coverage is available. As the legend to the Coverage Viewer maps indicates, these maps display approximate outdoor coverage. Actual coverage in an area may differ from the website map graphics, and it may be affected by such things as terrain, weather, network changes, foliage, buildings, construction, signal strength, high-usage periods, customer equipment, and other factors.

It is also important to note that the signal losses, slow data rates, and other service problems can and do occur for customers even at times when certain other customers in the same vicinity may not experience any problems on AT&T's network. These problems can and do occur even when certain customers' wireless phones indicate coverage bars of signal strength on the handset. The bars of signal strength that individual customers can see on their wireless phones are an imprecise and slow-to-update estimate of service quality. In other words, a customer's wireless

phone can show coverage bars of signal strength, but that customer will still, at times, be unable to initiate voice calls, complete calls, or download data reliably and without service interruptions due to service quality issues.

To determine where equipment needs to be located for the provisioning of reliable service in any area, AT&T's radio frequency engineers rely on far more complex tools and data sources than just signal strength from individual phones. AT&T uses industry standard propagation tools to identify the areas in its network where signal strength is too weak to provide reliable in-building service quality. This information is developed from many sources including terrain and clutter databases, which simulate the environment, and propagation models that simulate signal propagation in the presence of terrain and clutter variation. AT&T designs and builds its wireless network to ensure customers receive reliable in-building service quality. This level of service is critical as customers increasingly use their mobile devices as their primary communication devices. According to the Center for Disease Control and Prevention (CDC), more than 83% of California adults, and more than 98% of Californians under age 18, rely exclusively or primarily on wireless communications in their homes. And California households rely on their mobile devices to do more (E911, video streaming, GPS, web access, text, etc.). In fact, California reported to the FCC that there were more than 23.2 million wireless calls and 95,539 texts to 911 in 2021 (the most recent year for state level data).

The proposed facility at the Property is also a part of AT&T's commitment to supporting public safety through its partnership with FirstNet, the federal First Responder Network Authority. Conceived by the 9/11 Commission Report as necessary for first responder communications, Congress created the federal First Responder Network Authority, which selected AT&T to build and manage FirstNet, the first-ever nationwide first-responder wireless network. The proposed facility will provide new service on Band 14, which is the nationwide high-quality spectrum set aside by the U.S. government for public safety. Deployment of FirstNet in the subject area will improve public safety by putting advanced wireless technologies into the hands of public safety agencies and first responders.

The existing 4G LTE service coverage (without the proposed installation at the Property) map includes 4G LTE service coverage provided by other existing AT&T sites. The green shaded areas of the map depict acceptable and reliable in-building coverage. In-building coverage means

customers are able to place or receive a call on the ground floor of a building. The yellow shaded areas depict areas within a signal strength range that provide acceptable and reliable in-vehicle service coverage. In these areas, an AT&T customer should be able to successfully place or receive a call within a vehicle. The blue and white shading depicts areas within a signal strength range in which a customer might have difficulty receiving a consistently acceptable level of service. The quality of service experienced by any individual customer can differ greatly depending on whether that customer is indoors, outdoors, stationary, or in transit. Any area in the yellow, blue, or white category is considered inadequate service coverage and constitutes a service coverage gap.

The proposed coverage map predicts 4G LTE service coverage based on signal strength in the vicinity of the Property if the proposed facility is constructed as proposed in the application. As shown by this map, constructing the proposed facility at the Property closes this significant service coverage gap.

My conclusions are based on my knowledge of the Property and with AT&T's wireless network and its wireless communications facilities in the surrounding area. I have a Bachelor of Science Degree in Electrical Engineering from the University of California, Davis, and have worked as an engineering expert in the wireless communications industry for more than 29 years.



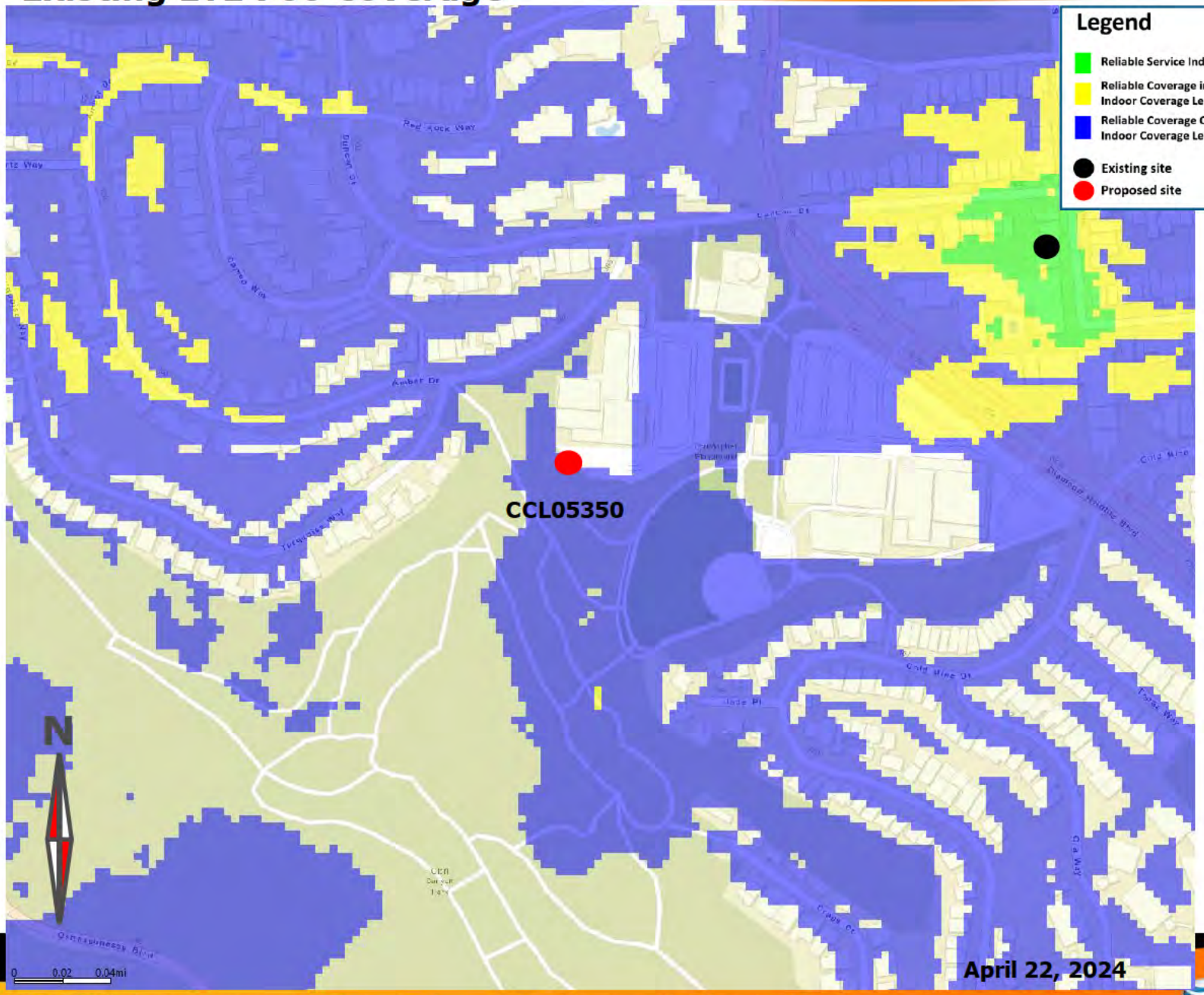
Michael Caniglia
AT&T Mobility Services LLC
Network, Planning & Engineering
RAN Design & RF Engineering
May 2024

CCL05350 Service Maps

April 22, 2024

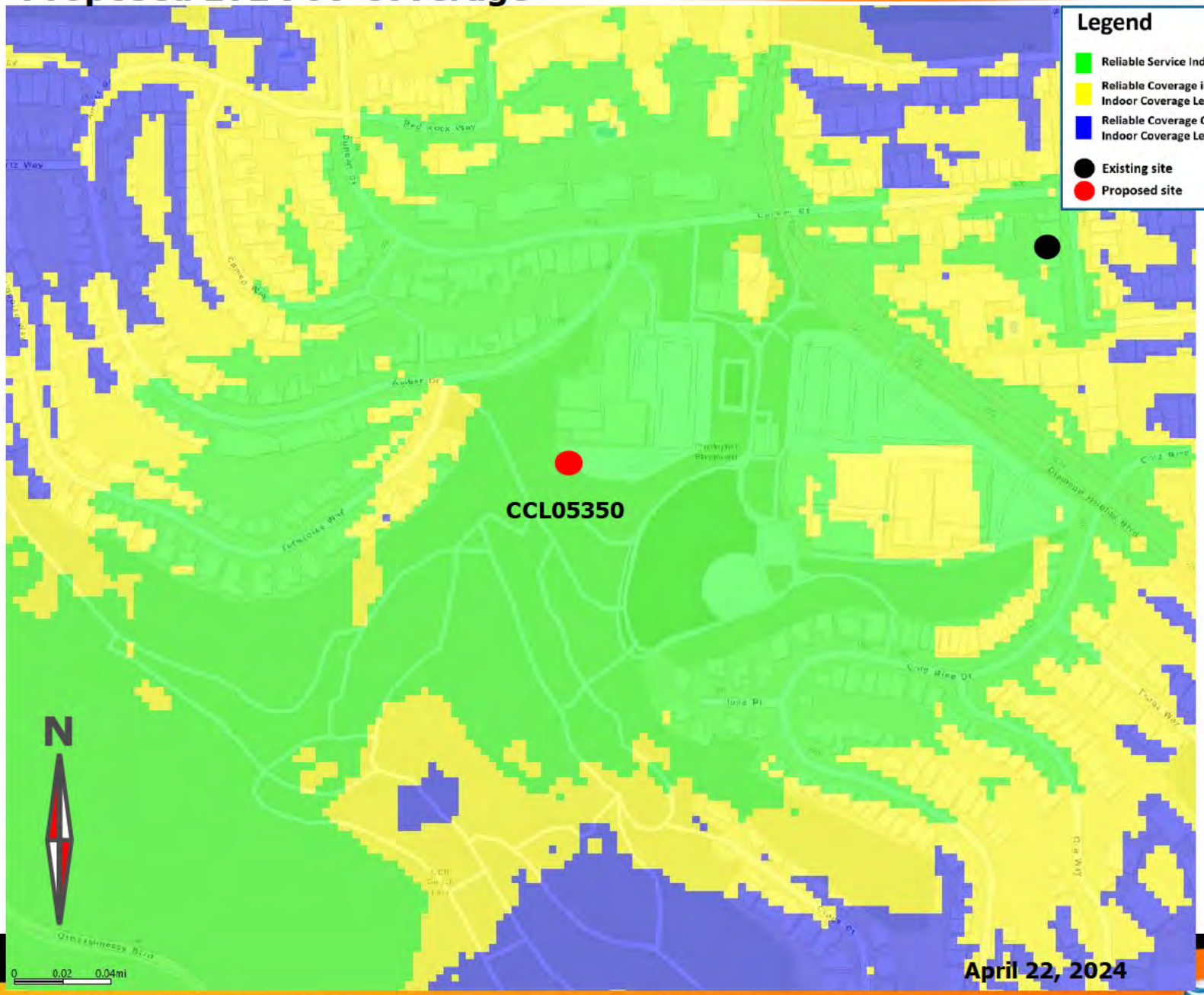
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Existing LTE 700 Coverage



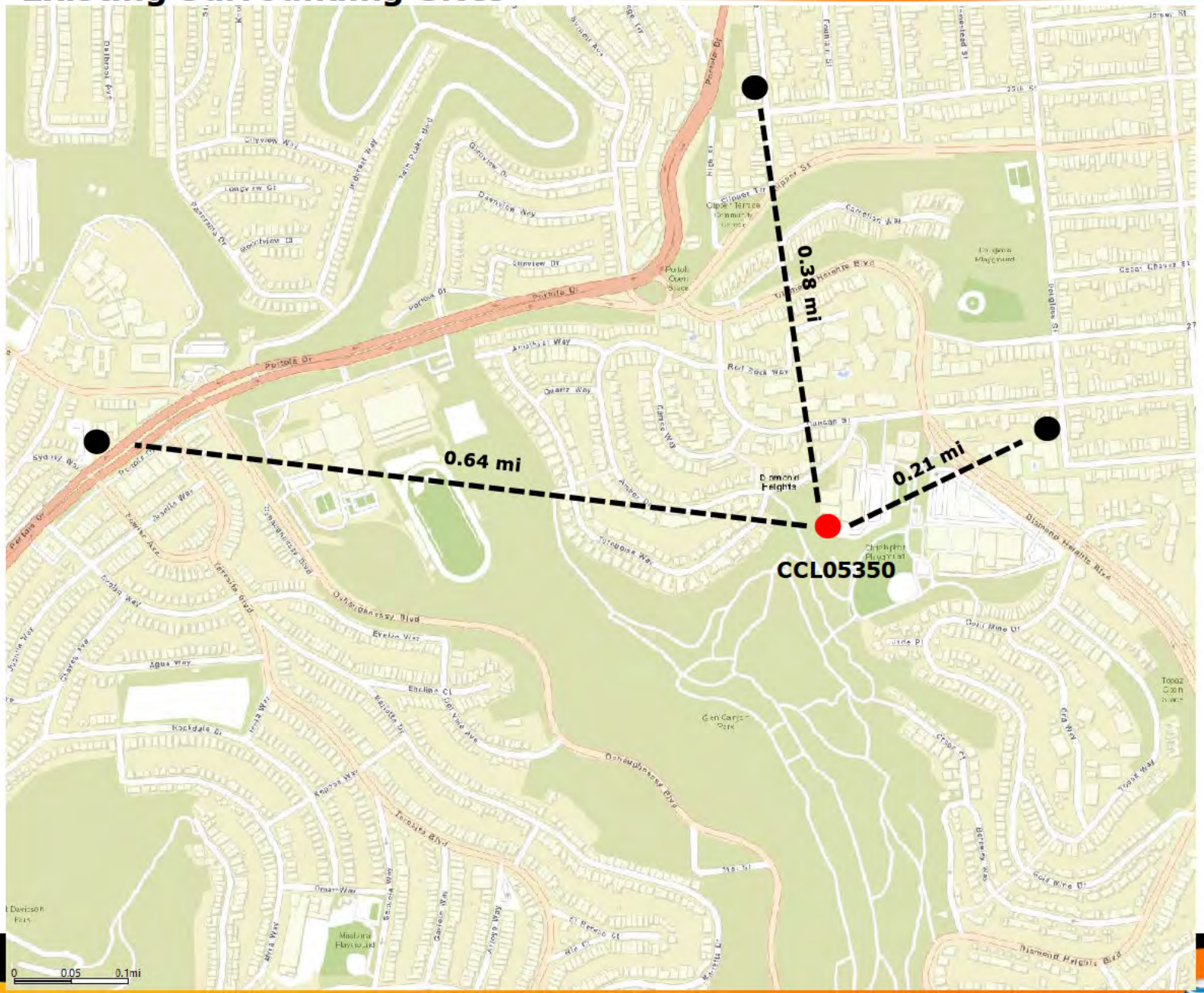
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Proposed LTE 700 Coverage



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Existing Surrounding Sites



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Attachment D
Hammett & Edison, Inc. Letter

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
BROADCAST & WIRELESS

WILLIAM F. HAMMETT, P.E.
ROBERT P. SMITH, JR.
MANAS S. REDDY, P.E.

ROBERT L. HAMMETT, P.E.
1920-2002
EDWARD EDISON, P.E.
1920-2009

DANE E. ERICKSEN, P.E.
CONSULTANT

BY E-MAIL BEN.FOUST@NEXTEDGENETWORKS.COM

May 6, 2024

Mr. Ben Foust
Modus LLC
240 Stockton Street, Third Floor
San Francisco, California 94108

Dear Ben:

As requested, we have conducted the review required by the City of San Francisco of the coverage maps that AT&T Mobility will submit as part of its application package for its base station proposed to be located at 350 Amber Drive (Site No. CCL05350). This is to fulfill the submittal requirements for Planning Department review.

Executive Summary

We concur with the coverage maps provided by AT&T for the proposed base station located at 350 Amber Drive in San Francisco. The maps provided to show the before and after conditions represent the carrier's present and post-installation coverage.

Based on information provided by AT&T, including zoning drawings by Spectrum Services, LLC, dated February 6, 2024, it is proposed to install twelve directional panel antennas – three each Quintel Model QD668-2 and QD6612-2, and six Ericsson Model AIR6419 – on a 100-foot steel pole to be installed south of the San Francisco Police Academy building located at 350 Amber Drive. The Quintel and Ericsson antennas would employ up to 14° and up to 19° downtilt, respectively. The Quintel antennas would be mounted at an effective height of about 100 feet above ground and the Ericsson antennas would be stacked in pairs at effective heights of about 97 and 103 feet above ground. The twelve antennas would be oriented in identical groups of four toward 0°T, 120°T, and 240°T, to provide service in all directions.

AT&T provided for review two coverage maps, dated April 22, 2024, attached for reference. The maps show AT&T's 4G LTE 700 MHz (Band 12) coverage in the area before and after the site is operational. Both the before and after maps show three levels of coverage, which AT&T colors and defines as follows:

Green	Reliable Service Indoors/Outdoors
Yellow	Reliable Coverage in Transit; Indoor Coverage Less Reliable
Blue	Reliable Coverage Outdoors Only; Indoor Coverage Less Reliable

We undertook a two-step process in our review. As a first step, we obtained information from AT&T on the software and the service thresholds that were used to generate its coverage maps. This carrier uses commercially available software to produce the maps. The service thresholds that AT&T uses are in line with industry standards, similar to the thresholds used by other wireless service providers.

As a second step, we conducted our own drive test, using an Ascom TEMS Pocket network diagnostic tool with built-in GPS, to measure the actual AT&T 4G LTE 700 MHz signal strength in the vicinity of the proposed site. Our fieldwork was conducted on May 1, 2024, between 10:30 am and 2:30 pm, along a measurement route selected to cover all the streets within the map area that AT&T indicated would receive improved service.

Based on the measurement data, we conclude that the AT&T 4G LTE 700 MHz coverage map showing the service area without the proposed installation includes areas of relatively weak signal levels in the carrier's present coverage. The map submitted to show the after coverage with the proposed base station in operation was reportedly prepared on the same basis as the map of the existing conditions and so is expected to accurately illustrate the improvements in coverage.

We appreciate the opportunity to be of service. Please let us know if any questions arise on this matter.

Sincerely yours,



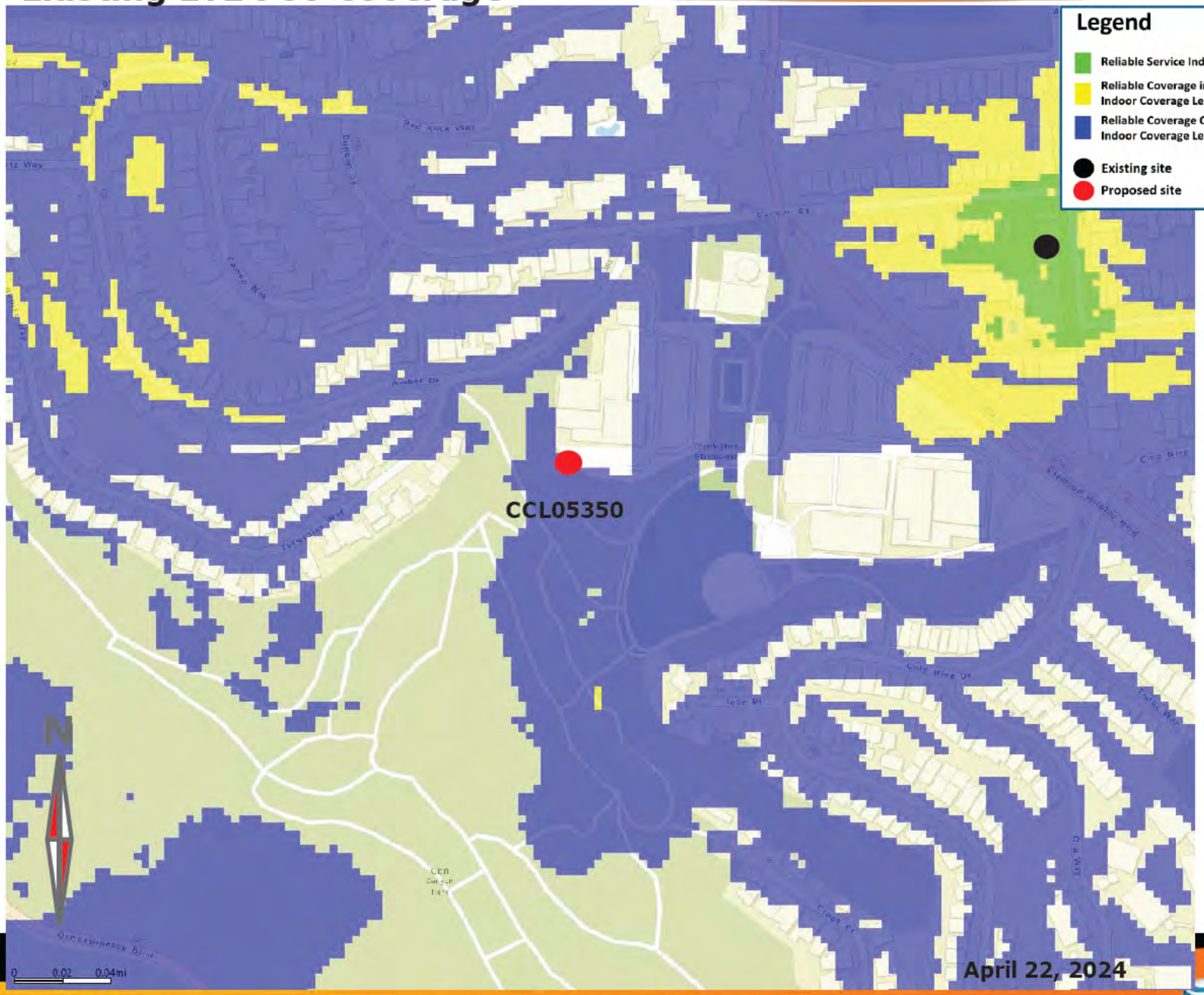
William F. Hammett, P.E.

mv

Enclosures

cc: Ms. Lorrie Billalon (w/encls) – BY E-MAIL LBILLALON@MODUSLLC.COM
Mr. Eric Lentz (w/encls) – BY E-MAIL LENTZPLANNING@GMAIL.COM

Existing LTE 700 Coverage



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Proposed LTE 700 Coverage



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Attachment E
Alternative Sites Analysis

SF Police Academy

Planning Commission

AT&T Site ID# CCL05350

350 Amber Drive

Case No. 2024-004318CUA/SHD

September 25, 2025

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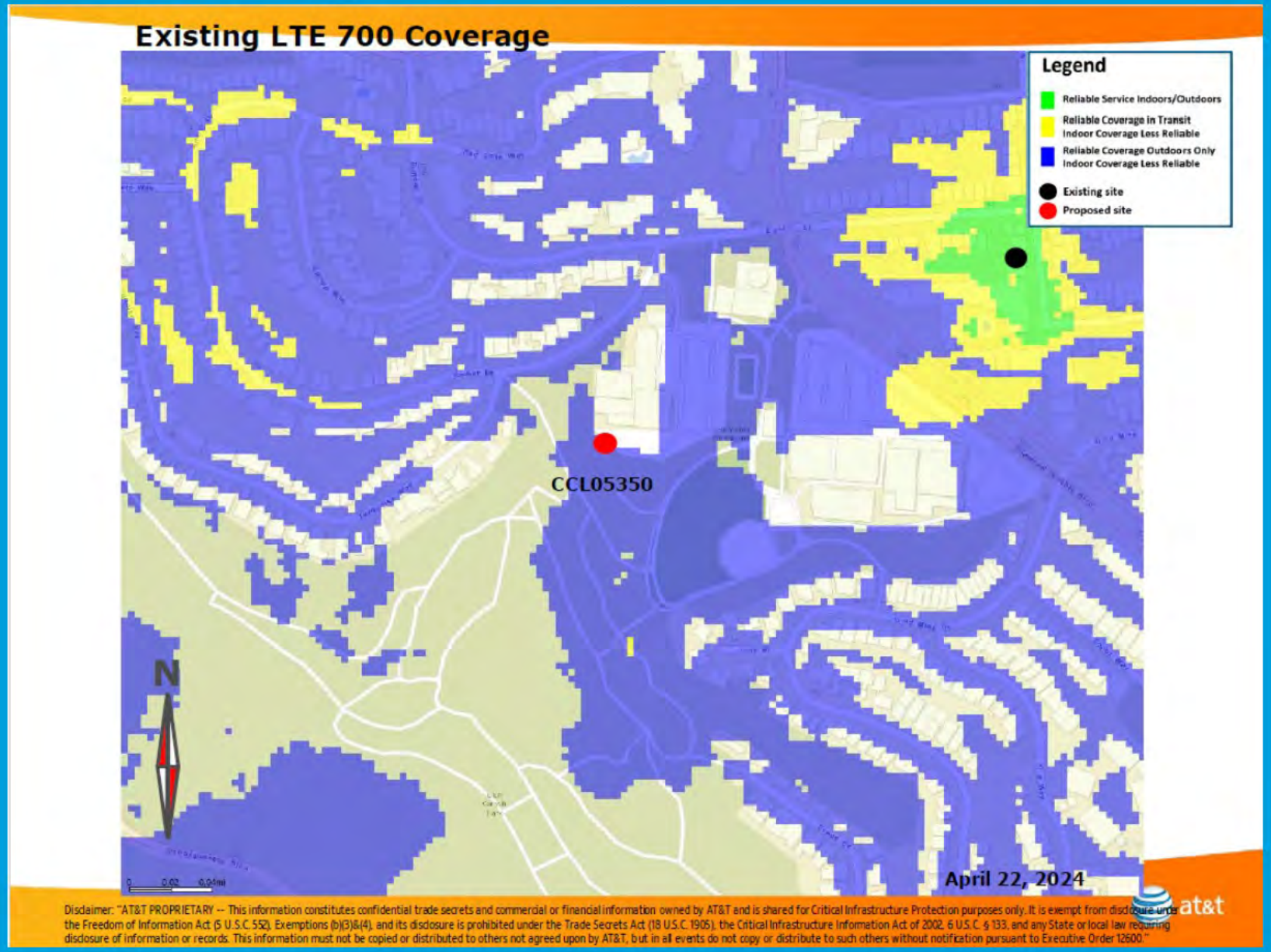
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Coverage Objective

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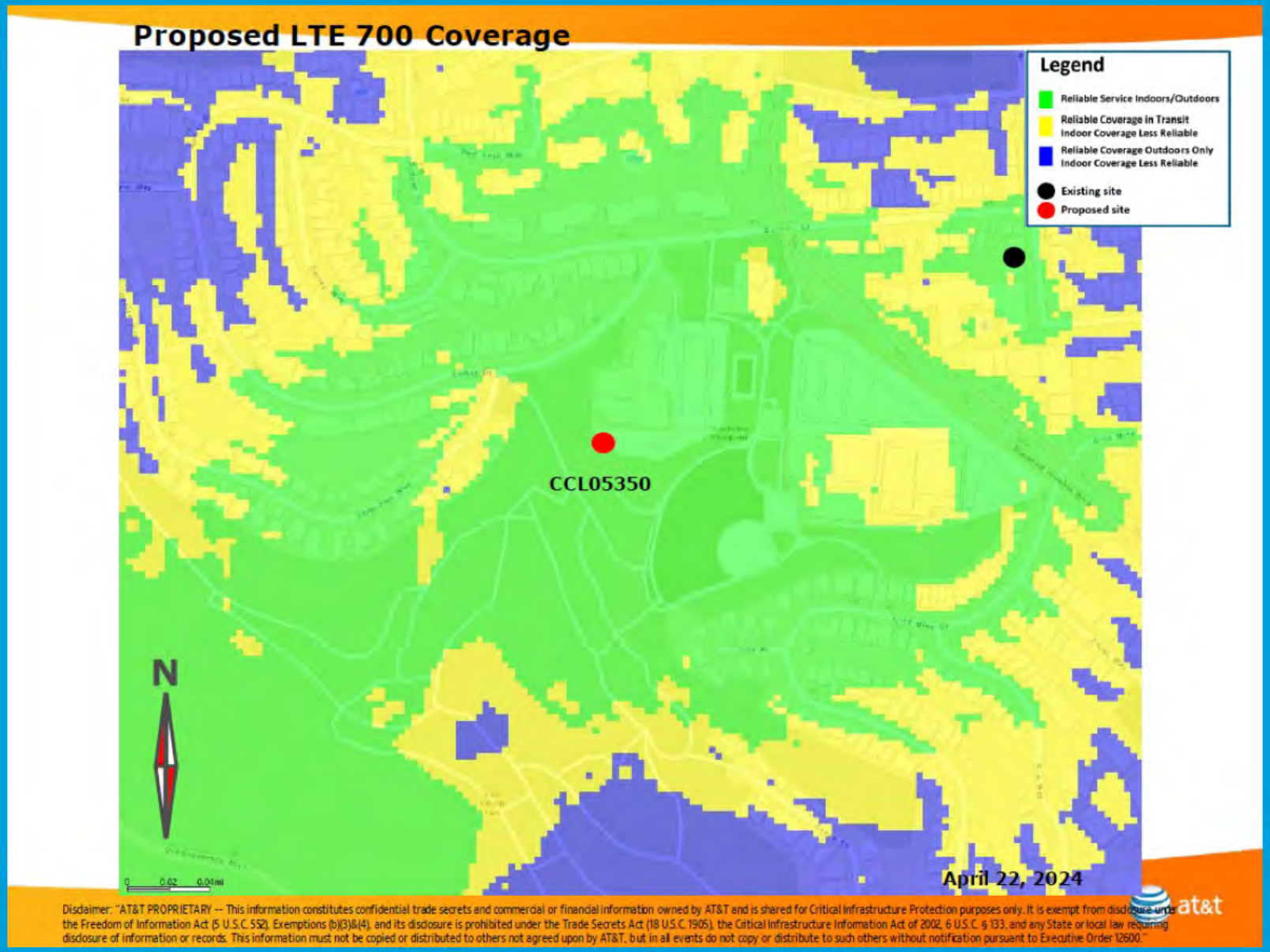
Existing AT&T Coverage



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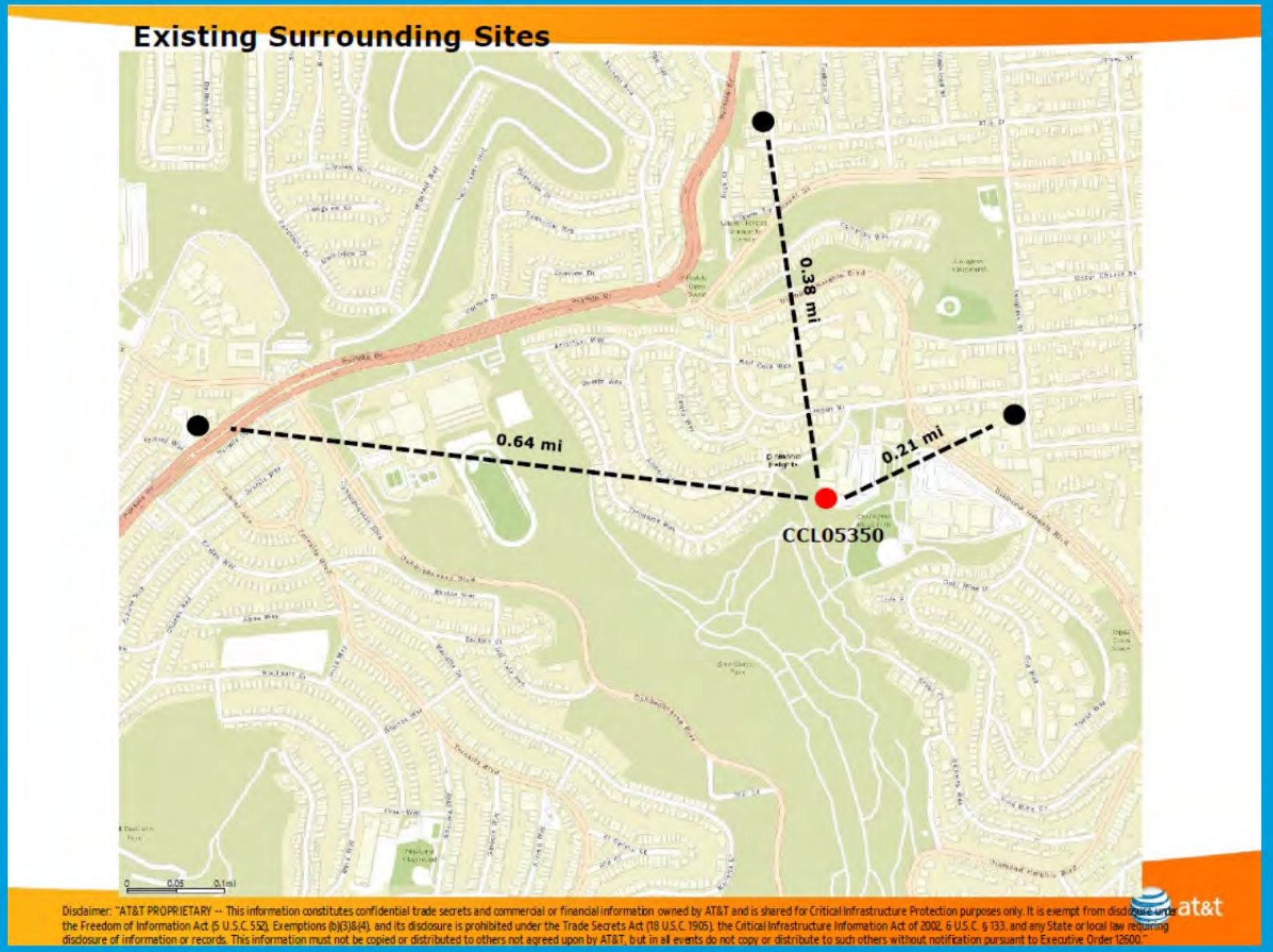
Proposed AT&T Coverage



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Nearest Wireless Facilities



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2

Alternative Locations

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AT&T

Wireless Telecommunications Services (WTS) Facilities Siting Guidelines

Preference	Examples	Properties in Search Area
1. Publicly-used facilities	Police or fire stations, libraries, community centers, utility poles, telephone switching facilities, churches, etc.	5
2. Co-Location Site	Any existing site on which a legal wireless telecommunications facility.	1
3. Industrial or Commercial Structures	Wholly industrial or commercial structures in certain zones where clutter on roof will be removed as part of installation.	none
4. Industrial or Commercial Structures	Wholly industrial or commercial structures in certain zones where no removal of existing visual clutter will be required.	1
5. Mixed Use Buildings in High Density Districts	Mixed use buildings in certain commercial zones	none
6. Limited Preference Sites	Certain neighborhood commercial zones	none
7. Disfavored Sites	Most residential zones	Most of the search area

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AT&T

Alternative Locations

Address	Use	WTS Location Preference	Reason for not Selected
350 Amber	Public Facility (SF Police Academy)	1	Subject Location
480 Teresita Blvd	Church (Cornerstone Baptist)	1	Location is closer to an existing facility but could provide service to the coverage objective. **Property owner was not interested.**
5200 Diamond Heights Blvd	Church (St. Nicholas)	1	Location is a lower rooftop and could provide service to portions of the coverage objective. However, antenna centerline height would be limited. **Property owner was not interested.**
101 Gold Mine Dr	Church (St. Aidan's)	1	Location would not provide sufficient signal to coverage objective area. Coverage area blocked by hillside to the south.
5210 Diamond Heights Blvd	Public Park (Glen Park)	1	Access to location and the availability of utility services would be limited. **Property owner was not interested.**
5285 Diamond Heights Blvd	Residential Apartments (Delphine)	2	Location would not provide sufficient signal to coverage objective area.
5214 Diamond Heights Blvd	Commercial (Diamond Heights)	4	Location is a lower rooftop with reduced visibility of the coverage objective area. View to the south would be blocked by the hill. **Property owner was not interested.**

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Alternative Locations



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AT&T


AT&T

P: (626) 314-3821
E: info@mitchtsailaw.com

Mitchell M. Tsai
Law Firm

139 S. Hudson Ave., Suite 200
Pasadena, California 91101

VIA E-MAIL

December 3, 2025

City and County of San Francisco, Board of Supervisors
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689
Em: Board.of.Supervisors@sfgov.org; bos.legislation@sfgov.org

RE: Appeal of Planning Commission's Conditional Use Authorization and Shadow Findings for 350 Amber Drive Project on September 25, 2025 – (2024-004318CUASHD)

Dear Board of Supervisors,

On behalf of Diamond Heights Community Association ("**Appellant**"), our Office is submitting this correspondence for the December 9, 2025 public hearing regarding appeals of the City and County of San Francisco ("**City**" or "**County**") Planning Commission's ("**Commission**") actions on September 25, 2025 for the development project proposed to be located at 350 Amber Drive in the City (Record No. 2024-004318ENV) ("**Project**"), including Approval of Conditional Use Authorization ("**CUA**") and Shadow Findings.

Appellant asserts that the Project Project's CUA and Shadow Findings are predicated on informational flaws and inconsistent with the City's land use policies, thereby requiring reversal of the Planning Commission actions on September 25, 2025. Appellant therefore respectfully submits that the Board of Supervisors ("**Board**") approve this appeal and reverse the Commission's approval of the CUA and Shadow Findings, for the Project. The Board should require Project modifications or conditions of approval to the CUA or Shadow Findings that address Appellant's environmental and public safety concerns.

The Diamond Heights Community Association is an organization of City residents and property owners near the Project site with a strong interest in well ordered land use planning and in addressing the environmental impacts of the Project, including potential impacts on the adjacent Glen Canyon Park and its natural and biological resources. Individual members of the Diamond Heights Community Association live,

work, and recreate in the Project vicinity and may therefore be directly affected by the Project.

The City describes the proposed Project as "the installation of a new AT&T Wireless Macro Wireless Telecommunications Services (WTS) Facility on an approximately 104-foot-tall monopole located at the rear of the San Francisco Police Academy. The WTS facility will consist of twelve (12) new antennas, nine (9) new remote radio units, three (3) tower mounted DC-9 surge suppressors, one (1) GPS unit mounted on proposed outdoor equipment cabinet, one (1) walk-up cabinet, and one (1) 30kw DC generator with a 190-gallon diesel fuel tank on a concrete pad. The ancillary equipment will be surrounded by an 8' chain link fence." (*See* September 25, 2025 San Francisco Planning Commission, Executive Summary, pp. 1-2).

Pursuant to City Planning Code, Section 308.1, our office asserts and raises the following grounds in support of its CUA appeal. On appeal, the Board of Supervisors is not limited to the Commission's earlier analysis or findings and may conduct its own independent review of whether the Commission's findings were proper and adequately supported.

The Appellant expressly reserves the right to supplement this letter with additional evidence and materials at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, Section 65009(b); Pub. Res. Code, Section 21177(a).

Lastly, the Appellant further fully incorporates by reference all the comments and concerns raised to date on the Project or its environmental CEQA clearance, including **Appellant's own correspondence in support of its appeal of the Project's CEQA Exemption Determination, submitted to the Board on November 26, 2025**. *See Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

I. THE BOARD SHOULD APPROVE THE CONDITIONAL USE AUTHORIZATION APPEAL BECAUSE THE PLANNING COMMISSION'S CONDITIONAL USE AUTHORIZATION AND SHADOW FINDINGS ARE FLAWED AS A MATTER OF LAW.

The Planning Commission's findings of Conditional Use Authorization under the Planning Code section 303, include, *inter alia,* the findings that:

(c) **Determination.** After its hearing on the application, or upon the recommendation of the Director of Planning that no hearing is required, the Planning Commission shall approve the application and authorize a Conditional Use if the **facts presented** are **such** to **establish** that:

(1) The proposed use or feature, at the size and intensity contemplated and at the proposed location, will provide a development that is **necessary** or **desirable** for, and **compatible with**, the **neighborhood** or the **community**. If the proposed use exceeds the Non-Residential Use Size limitations for the district in which the use is located, the following shall be considered:

(A) The intensity of activity in the district is not such that allowing the larger use will be likely to foreclose the location of other needed neighborhood-servicing uses in the area; and

(B) The proposed use will serve the neighborhood, in whole or in significant part, and the nature of the use requires a larger size in order to function; and

(C) The building in which the use is to be located is designed in discrete elements which **respect** the **scale** of **development** in the **district**; and

(2) Such use or feature as proposed will **not** be **detrimental** to the **health**, **safety**, **convenience** or **general welfare** of **persons residing** or **working** in the **vicinity**, or **injurious** to **property**, **improvements** or **potential development** in the vicinity, with respect to **aspects** including but not limited to the following:

(A) The **nature** of the proposed site, including its **size** and **shape**, and the proposed **size**, **shape** and **arrangement** of **structures**;

(B) The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading and of proposed alternatives to off-street parking, including provisions of car-share parking spaces, as defined in Section 166 of this Code.

(C) The **safeguards afforded** to prevent **noxious** or **offensive emissions** such as **noise**, **glare**, dust and **odor**;

(D) Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs; and

> (3) **Such use** or **feature** as proposed will comply with the **applicable provisions** of this **Code** and will not **adversely affect** the **General Plan**; **and**
>
> (4) Such use or feature as proposed will provide development that is in **conformity** with the **stated purpose** of the applicable **Use District**; **and**
>
> (5) The use or feature satisfies any **criteria specific** to the use or feature in Subsections (g), *et seq.* of this Section.

Exhibit 1 (Planning Code Section 303) (emphases added).

As evidenced by the Motion adopted by the Planning Commission, the text of the Planning Code 303 and the resulting analysis of the Project's consistency therewith were incomplete and non-responsive.

Most critically, in light of the seismic, fire, and chemical hazards and both noxious and also health-damaging odors presented by the Project and its operation of the 190 gallon fuel tank, as well as the Project's manifest incompatibility with express applicable General Plan policies and goals, as detailed further below, the Planning Commission's findings that the Project would not be detrimental to the public health and safety or injurious to the surrounding people and their properties, as well as the findings that the Project is consistent with the General Plan, are wholly unsupported and must be set aside. That the Project is not necessary and not desirable to the surrounding community is evidenced by the public outcry and numerous public comments in opposition of the Project, as well as the lack of interest of any nearby commercial structure or property owner to accommodate the Project.

As such, the Planning Commission's findings under Planning Code section 303 should be set aside as clearly erroneous, manifestly deficient, and factually unsupported.

For the same reasons, the Planning Commission's findings under Planning Code section 101.1(b) are unsupported, especially as to policies 6-8, which state:

> (6) That the City achieve the **greatest possible preparedness** to protect against **injury** and **loss** of **life** in an **earthquake**;
>
> (7) That **landmarks** and **historic** buildings be **preserved**; and,
>
> (8) That our **parks** and **open space** and their **access** to **sunlight** and **vistas** be protected from development.

Exhibit 2 (Planning Code Section 101 & 101.1) (emphases added)

With the Project here, the City does not achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake, but rather makes the entire surrounding residential community exposed to heightened and more severe losses and injury to life in a potential earthquake by allowing a 104-feet tall power-charged tower, its 500 square feet base structure, and its 190 gallon fuel tank be built and placed near the fire-prone eucalyptus tree grove in a landslide zone on a site with a record history of seismic failures. The landmark of Glen Canyon Park here will not be preserved either, in the event of a wildfire which may be caused by the Project itself. And the Glen Canyon Park will not be protected from development and destruction.

Similarly, to support the Project's Shadow findings, the Planning Commission adopted findings pursuant to Planning Code section 295. And yet, such findings are also in error where, as here, there is no consistent project description: on the one hand, the Project is presented as merely a 104-feet tall *monopole,* which is to be painted brown; but on the other hand, the Project plans expressly mention a *monopine,* i.e., an artificial pine tree. To the extent the Project is indeed proposing a *monopine,* then its shadow study and related findings need to be updated and revised as the pine tree will cast more shadow on the nearby structures and uses, as compared with a bare monopole. To the extent the Project indeed proposes a *monopole,* then the Project Applicant should be required to update its Project Plans and provide accurate information. Notably, the Project Plans also leave out certain critical information as to the location of the Project, including its dimensions, blank, as shown in the screenshot below (highlights added):

NOTES:

1. DATE OF SURVEY: 12/14/2023
2. ACREAGE PARCEL: X.XX ACRES
3. ASSESSOR'S PARCEL NUMBER(S): XXX-XX-XXX
4. PROPOSED LEASE AREA: F.FF' x F.FF' = FFF SQUARE FEET
5. PROPERTY OWNER(S):
6. MAGNETIC DECLINATION: XX.XX°
7. CONVERGENCE ANGLE: -X°XX'XX"

FIRM CLASSIFICATION

THE PROPERTY SHOWN HEREON FALLS WITHIN ZONE "X" AS SHOWN ON FLOOD INSURANCE RATE MAP NO. 0602980230A, EFFECTIVE DATE MARCH 23, 2021, AS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM.

(ZONE "X" BEING CLASSIFIED AS AREAS OF MINIMAL FLOOD HAZARD PER SAID F.E.M.A. MAP ABOVE)

PROPOSED ANTENNA GEODETIC COORDINATES

THE CENTER OF THE PROPOSED ANTENNAS AS SHOWN HEREON IS LOCATED AT THE FOLLOWING COORDINATES (NAD 83):

LATITUDE: N XX°XX'XX.XX"
LONGITUDE: W XXX°XX'XX.XX"

THE LATITUDE AND LONGITUDE SHOWN HERON WERE DERIVED FROM DATA COLLECTED USING A TRIMBLE R10-2 GNSS DUAL FREQUENCY RECEIVER AND PROCESSED THROUGH THE NATIONAL GEODETIC SURVEY ONLINE POSITIONAL USER SERVICE. ACCURACY FOR KINEMATIC SURVEYING USING A TRIMBLE R10-2 GNSS RECEIVER IS HORIZONTALLY ±10MM+1 PPM RMS.

Indeed, in at least one of the maps for the Project that was reviewed by the Planning Commission in reaching its determinations incorrectly depicts the wireless tower on the wrong hill and different location than where it is actually being proposed. Specifically, the maps depicts the project on Gold Mine Hill whereas it is actually being proposed on Red Rock Hill.

The Project Plans should be updated to include all of the accurate information, before any Project may be approved or any finding may be made.

Further, because of the above-noted *omissions* and failures of the Planning Commission to address and mitigate the critical public concerns and comments on the Project, the adopted findings to support the conditional use authorization or the shadow findings cannot survive scrutiny, as a matter of law.

Lastly, the Planning Commission's findings of General Plan consistency are unsupported. In addition, the General Plan consistency findings are deficient as they

leave out the Project's inconsistencies with the open space preservation and public health and safety policies under the General Plan and its Open Space and Safety Elements. As related, because of the Project's manifest inconsistencies with the General Plan, it violates the State Planning and Zoning Law which requires both vertical consistency with the General Plan and also internal consistency between elements of the General Plan.

II. THE PLANNING COMMISSION FAILED TO FULLY CONSIDER AND ANALYZE THE PROJECT'S INCONSISTENCIES WITH THE CITY'S GENERAL PLAN AND OWN LAND USE POLICIES.

On September 25, 2025, the Planning Commission adopted several findings of the Project's purported consistency with the General Plan. Notably, the County and the Planning Commission ignored the *relevant* and *critical* General Plan policies. But the State Planning and Zoning law or the County's Planning Code do not require consistency with only cherry-picked policies, but rather to ensure that the Project is *compatible with* the General Plan overall and does not frustrate *any* of the General Plan's policies. To ensure such compatibility, the County should look not only at the alleged *consistencies,* but first and foremost, at the *inconsistencies* of the Project with the General Plan. In the words of one California court in an analogous context:

> "The County first contends that the goals and policies stated in its General Plan should not be viewed as directives, and the General Plan therefore should be read as advisory rather than mandatory. This contention conflicts with the **recognition** that **consistency requires compatibility** with the general plan's "**objectives**, **policies**, **general land uses**, and **programs**." (internal citation and quotation omitted) The question is not whether there is a direct conflict between some mandatory provision of a general plan and some aspect of a project, but **whether** the **project** is **compatible with**, and **does not frustrate**, the **general plan's goals** and **policies**."

(*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors*, 91 Cal.App.4th 342, 378 (2001) (emphases added.)

Viewed from such correct perspective, the Project here is *incompatible with* and *frustrates* several critical policies of the General Plan and its various Elements.

First, in its *Introduction* to the General Plan, the City provides the following vision:

> "In this shared vision, San Francisco strives to be… a safe, livable and environmentally sustainable city, where **all are** able to live **healthy lives** and

> **access thriving natural systems**, **restorative parks**, and a **high-quality built environment**. The climate crisis requires urgent local, regional, and global action."

Exhibit 3, p. 2 (Introduction to General Plan) (emphases added).

The City's Introduction also acknowledges the various natural disasters to which San Francisco has been subject and prone to:

> Amid this beloved setting lies the inherent, often **hidden fragility**, including **vulnerability** to **natural disasters** and to the **mounting consequences** of anthropogenic **climate change**….

Exhibit 3, p. 1 (emphases added)

Second, it becomes more than clear that the General Plan – especially for the Project Site zoned Open Space and located near the Glen Canyon Park – imposes a critical policy of *preserving* the open space, including to ensure public health and safety.

Against this backdrop, the Planning Commission's sole reference to the City's Recreation and Open Space Element focused on only one policy and provided a stretched reasoning as to why the Project meets that single policy goal. Specifically, the Planning Commission stated:

> OBJECTIVE 1
>
> ENSURE A WELL-MAINTAINED, HIGHLY UTILIZED, AND INTEGRATED OPEN SPACE SYSTEM
>
> Policy 1.10
>
> Ensure that open space is safe and secure for the City's entire population.
>
> *The Project will improve AT&T's coverage and capacity within George Christopher Playground and Glen Canyon Park, and in the Diamond Heights neighborhood.*

However, the Recreation and Open Space element contains numerous other policies that also merit careful consideration. Moreover, the Planning Commission's reasoning that the Project will *improve AT&T's coverage and capacity* within the playground and park and in the neighborhood does not address the *safety* and *security* for the City's surrounding population, let alone the City's entire population. As detailed above, the Project will indeed create or exacerbate significant landslide hazards, fire hazards, and contamination for the surrounding community.

In addition, unlike only *one* guiding principle, objective and policy (Objective 1, policy 10.1) referenced in the Planning Commission's adopted Motion to approve the Project and related findings of General Plan consistency, the Recreation and Open Space Element of the San Fernando General Plan contains *numerous guiding principles,* as follows:

> **1. INTEGRATED & MULTIFUNCTIONAL.** A major theme developed from the outreach process was the concept of "making the most of what we have": utilizing and improving the expansive recreation and open space system the City already provides. An integrated and multi-**functional open space network** would respond to a variety of **needs** for **recreation** and **open space**, better utilizing the existing resources. Such needs range from refreshing from daily pressures of life to exercising and active sports, from appreciating the beauty of nature to **maintaining natural habitats** and **wildlife**, and from enjoying **play time** for **kids** and adults to housing civic and cultural events.
>
> **2. SENSE OF PLACE.** San Francisco is a regional epicenter for ecological, economic, and cultural diversity. Open spaces should aim to build on our City's intrinsic qualities, both natural and cultural, and to reflect the values we place on cultural diversity and biodiversity. Furthermore, they should create a network that inspires a deep connection to place.
>
> **3. EQUITY & ACCESSIBILITY.** Open space and recreational programs should be equitably distributed. They should provide access for all residents, workers and visitors, and work towards a democratic network that includes all neighborhoods.
>
> **4. CONNECTIVITY**. San Francisco's network of **open** spaces should be **wholly connected**. The open space system should facilitate **non-motorized movement**, link **diverse neighborhoods**, be easy to navigate and understand and, where feasible, **enhance habitat** through connectivity.
>
> **5. HEALTH & SAFETY.** Open space should increase the City's capacity to be a **safe** and **healthy** place to live. Its design should **promote social interaction**, **wellness**, and a **healthy lifestyle** by providing **opportunities** for **physical**, cultural and social activities, and a **connection** to **nature**.
>
> **6. ECOLOGICAL FUNCTION & INTEGRITY.** With environmental sustainability as a driving theme, the quantity and quality of natural systems in the City should be preserved and expanded, by

> promoting aquatic and terrestrial biodiversity, by designing for watershed health, and by implementing environmental, ecological and conservation-minded strategies.
>
> **7. SUSTAINING STEWARDSHIP.** San Francisco's community members should be actively engaged as participants in its future. Policies should work towards shared, continued stewardship that increases the tangible link between community members and their open space network. Partnerships between public agencies, private business, and community based non-profits, and individual members of the community to foster pride, purpose and community should continue to be developed.

Exhibit 4 (Recreation and Open Space Element) (emphases added).

As evident from the emphasized parts of the above-quoted passage, the Open Space Element's referenced and contemplated *health and safety* of the population is *unrelated* to the wireless access of people. It only seeks to ensure public health and safety by ensuring the *availability* of *accessible* open space for everyone. Similarly, the only connectivity referenced in the guiding principles above is not about wireless connectivity, but rather the ability of people to connect to and visit various parks and natural open space areas without cars.

Moreover, the Recreation and Open Space Element contains the following goals and policies on point that the Planning Commission has been silent about:

> "**OBJECTIVE 1**
>
> **ENSURE A WELL-MAINTAINED, HIGHLY UTILIZED, AND INTEGRATED OPEN SPACE SYSTEM**
>
> …
>
> **POLICY 1.3**
>
> **Preserve** existing open space by **restricting** its **conversion** to **other uses** and **limiting encroachment** from **other uses**, assuring **no loss** of **quantity** or **quality** of open space.
>
> The shortage of vacant sites and the intensity of development in San Francisco produce pressures on the City's public open spaces, sometimes putting spaces at risk of conversion to uses not serving the public purpose of respite and recreation. These same factors generate considerable public demand for access to open spaces. It is **essential** that

> the **City protect** its **public open** spaces from **conversion** to other uses, which **threatens** the **overall integrity** of the **open space network**.
>
> Outdoor space in **parks** and **playgrounds** should **not** be diminished except in very unique cases. Yet, despite general agreement on the need to preserve public open space, developments may indeed be proposed on public land designated as open space. It is anticipated that the most persuasive arguments in favor of development will be based on the "**public value**" of the proposed development. The public value will differ among proposals, and a determination of this projected value as compared the potential open space benefit will be difficult and must be subject to **rigorous public scrutiny**…"

Exhibit 4 (emphases added.)

The Project is manifestly incompatible with this objective and policy of the General Plan and Open Space Element, and frustrates them by allowing a hazardous wireless tower use within the Open Space zone and immediately next to a critical environmental resource of the Glen Canyon Park, recreational areas, residences, and other public parks. The Project is also incompatible with the above-quoted goal and policy by disregarding the public outcry here about the Project's hazards and by overestimating the "public benefit" of providing better wireless services to a community, which plainly disagrees with such a need and unambiguously refuses to accept the claimed "public benefit." As the Staff Report acknowledged, while the Project Applicant AT&T searched for other prime areas, including churches in the area with the alleged gap in coverage, other alternative sites expressed no interest in such coverage or proposal to install a wireless facility.

Moreover, contrary to AT&T's suggestions that it has a FirstNet contract with police and fire services supporting the need for wireless coverage, public communications with and inquiries confirmed that FirstNet is not the only service fire and police personnel use and the emergency services do not depend on FirstNet.

Similarly, when presenting the Project's compatibility with the Safety Element, the Planning Commission focuses only on Objective 3 of that element and disregards the rest, as shown below:

> "**COMMUNITY SAFETY ELEMENT**
>
> Objectives and Policies
>
> **OBJECTIVE 3**

ESTABLISH STRATEGIES TO ADDRESS THE IMMEDIATE EFFECTS OF A DISASTER.

Policy 1.20

Increase communication capabilities in preparation for all phases of a disaster and ensure communication abilities extend to hard-to-reach areas and special populations.

Policy 2.4

Bolster the Department of Emergency Management's role as the City provider of emergency services and communication, and prioritize its actions to meet the needs of San Francisco.

Policy 2.15

Utilize advancing technology to enhance communication capabilities in preparation for all phases of a disaster, particularly in the high-contact period immediately following a disaster.

Policy 3.7

Develop a system to convey personalized information during and immediately after a disaster.

The Project will enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services."

But the City's Safety and Resilience element is not limited to only *management* of the emergencies, but rather to also *preventing* or *reducing the risk* of such emergencies. Also, it is questionable how the Project's sole provision of allegedly now-missing wireless service by AT&T will help the public in case of a fire or natural disaster. And, critically, the Planning Commission fails to realize that the Project *itself* will cause such fire and natural disasters due to its siting in an environmentally sensitive area and by having hazardous features, as discussed above.

Critically, the City's Safety and Resilience Element contains the following six (6) goals:

"In brief, the Safety & Resilience Element is organized into six goals to achieve racial and social equity, environmental justice, and climate resilience.

All People Live in Safe & Healthy Communities: To ensure equitable safety, San Francisco must remedy past injustices and eliminate environmental burdens for all San Franciscans, starting with those experienced by Environmental Justice Communities.

> **Multi-Benefit Climate and Hazard Resilience:** Pursue **multi-hazard risk reduction strategies** and maximize community benefits along the way to becoming a net-zero emissions City by 2040.
>
> **Hazard Mitigation:** The City must **reduce** the **likelihood**, **scale**, and **severity** of **impacts** from **all disasters** to the economy; the built and natural environment; and all communities, starting with reducing such impacts in Environmental Justice Communities.
>
> **Emergency Preparedness:** Ensure San Francisco residents, workers, and visitors have the knowledge, capacity, and government support needed to be safe in the face of disasters.
>
> **Response:** Provide San Francisco residents, workers, and visitors with the essential support and services needed immediately following a disaster for life safety and functional recovery.
>
> **Recovery and Reconstruction:** Rebuild San Francisco's built, natural, and social assets and communities towards a more equitable and resilient future."

Exhibit 5, p. 1 (Safety and Resilience Element) (emphases added).

As shown in the emphasized portions, the Safety and Resilience Element seeks to *reduce the risks* of hazards, and not just manage the hazards post-facto, as the Planning Commission focused on.

To be more specific, the Safety and Resiliency Element contains a specific GOAL 3: Hazard Mitigation, which provides in pertinent parts:

> "The City must **reduce** the **likelihood**, **scale**, and **severity** of **impacts** from **all disasters** to the economy; the built and **natural environment**; and **all communities**, starting with reducing such impacts in Environmental Justice Communities."

Exhibit 5, p. 10 (emphases added)

The Safety and Resiliency Element also provides the following policy:

> "**POLICY 3.2.4. Ensure foundations and structural systems are designed with consideration of site soils conditions when reviewing projects in areas subject to liquefaction, slope instability, sea level rise, groundwater rise, and other flood hazards.**
>
> The Building Code considers soil conditions at a very general scale. But, soil conditions vary enormously throughout the City. Different **soil conditions** can result in very **different earthquake**

> **impacts** and can **result** in **damage** at other times, such as with **landslides**. Because of the **importance** of **soil conditions**, the California Seismic Hazards Mapping Act requires that a **geotechnical investigation** and **geotechnical report** be prepared for **new** or **renovated buildings** that are constructed in **Seismic Hazard Zones**."

Exhibit 5, p. 14 (emphasis added).

In addition, contrary to the noted objective and policy, the Project here – consisting of a 104-feet tall monopine or monopole and further a 500 square foot building and a 190 gallon fuel tank generator – is proposed in the landslide zone on a site with the history of seismic failures. And the City has not even disclosed, much less addressed, the soil instability and landslide hazards that the Project may cause or exacerbate, let alone present a geotechnical evaluation for public review on how those hazards are reconciled or compatible with the General Plan policies.

As the Court agreed in an analogous context, a Project's incompatibility with even *one* clear policy of the General Plan or its Elements may scuttle the project. *Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Sup'rs*, 62 Cal.App.4th 1332, 1341–1342 (1998). Here, the Project clearly frustrates several policies of the General Plan, including the policy of ensuring the health and safety of people by preserving and enhancing quality open space, as well as the policies of reducing risks of hazards and duly investigating various hazards, including soil instability, prior to approving any project.

Notably, the above-noted goals, objectives, and policies, which the Project is not compatible with, are only illustrative and not exhaustive. Both the Recreation and Open Space Element, as well as the Safety and Resilience Element contain numerous similar policies to ensure public access to safe open space, preservation of the scarce open space, protection of parks and playgrounds, and reducing risks of any hazards.

The Project clearly frustrates the noted policies, creating a vertical inconsistency and incompatibility with the General Plan, and thereby violating both the City's General Plan, as well as the State Planning and Zoning Law's requirement of vertical consistency of projects with their applicable General Plan.

As relevant, the Project's posed imminent hazards to the invaluable open space and recreation space and the fact that, as the City's General Plan noted, it is impossible to acquire new land for open space and the City of San Francisco is growing in density, the Project's potential destruction of the existing open space and frustration of

policies with the Safety and Open Space Elements will create *internal* inconstancies within the City's General Plan, including with the Land Use and Circulation Elements by allowing dense development while at the same time allowing to reduce the existing open space in quantity or quality. And yet, the State Planning and Zoning Law requires *internal consistency* within the General Plan. For this reason, too, the Project violates the State Planning and Zoning Law by creating an internal inconsistency in the City's General Plan.

As such, the Planning Commission's findings that the Project is consistent and compatible with the General Plan must be set aside as are unsupported, as a matter of law, since they are based on the glaring omissions of relevant policies and objectives and since they are based on a cursory and distorted review of the applicable General Plan policies and strained justifications thereof.

For all of the reasons above, the Planning Commission's findings and approval of the Conditional Use Authorization, Shadow Findings, and related findings of General Plan consistency under the Planning Code must be set aside as being premised on erroneous, missing, incomplete, and inaccurate information and for failing to fully consider and analyze the Project's hazards, significant threats to public life and safety, adverse impacts to the nearby open space and biological resources, and the General Plan inconsistencies, both vertically and internally.

III. CONCLUSION

In sum, the Planning Commission's approvals for the 350 Amber Drive Project on September 25, 2025 must now be reversed by the Board because they are fundamentally and demonstrably flawed.

The Board should accept and hold a public hearing regarding Appellant's CUA appeal filing and reverse the Commission's Conditional Use Authorization and Shadow Findings. The Commission's findings were improper and based on informational flaws and the Project itself is inconsistent with the City's own General Plan and land use policies.

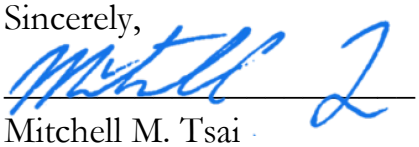
Appellant urges the Board to approve its CUA appeal in its entirety, reversing the Planning Commission's approval of the Conditional Use Authorization and Shadow Findings, and deny the Project outright. The totality of the evidence, including the Project's significant environmental impacts and substantial factual and informational

flaws, compels the denial of a project incompatible with the City's own General Plan and land use policies.

Should the Board nonetheless permit this controversial Project to move forward, it is legally obligated to approve the CEQA appeal and require the preparation of a full Environmental Impact Report (EIR) for the Project. An EIR is the highest form of environmental review and is especially necessary here to accurately assess the Project's significant impacts on the sensitive environment, evaluate feasible mitigation measures, and consider less destructive project alternatives. The Project's mass, scale, associated seismic, fire, and chemical hazards, and critical setting in one of San Francisco's naturally significant areas warrant the most rigorous public disclosure and environmental analysis to ensure the protection of the impacted community and the natural resources of Glen Canyon Park. Such reasoned and detailed review regarding the Project's impacts are also critical and required by law, in the event the case proceeds to judicial review. Lastly, Appellant respectfully requests that the Board direct City Staff and the Project applicant to address the public's concerns and comments regarding the Project.

Should the City have any questions or concerns regarding this correspondence, please do not hesitate to contact our office.

Sincerely,



Mitchell M. Tsai
Attorney for Appellant

Attachments:

Exhibit 1: County's Planning Code Section 303;

Exhibit 2: County's Planning Code section 101 and 101.1;

Exhibit 3: Introduction to the City's General Plan, as obtained from the City's website;

Exhibit 4: Recreation and Open Space Element of the City's General Plan, as obtained from the City's website;

Exhibit 5: Safety and Resilience Element of the City's General Plan, as obtained from the City's website;

EXHIBIT 1

SEC. 303. CONDITIONAL USES.

(See Interpretations related to this Section.)

(a) **General.** The Planning Commission shall hear and make determinations regarding applications for the authorization of Conditional Uses in the specific situations in which such authorization is provided for elsewhere in this Code. The procedures for Conditional Uses shall be as specified in this Section 303 and in Sections 306 through 306.6, except that Planned Unit Developments shall in addition be subject to Section 304, and Hospitals and Post-Secondary Educational Institutions shall in addition be subject to the Institutional Master Plan requirements of Section 304.5.

(b) **Initiation.** A Conditional Use action may be initiated by application of the owner, or authorized agent for the owner, of the property for which the Conditional Use is sought. For a Conditional Use application to relocate a General Advertising Sign under subsection (I) below, application shall be made by a General Advertising Sign company that has filed a Relocation Agreement application and all required information with the Planning Department pursuant to Section 2.21 of the San Francisco Administrative Code.

(c) **Determination.** After its hearing on the application, or upon the recommendation of the Director of Planning that no hearing is required, the Planning Commission shall approve the application and authorize a Conditional Use if the facts presented are such to establish that:

(1) The proposed use or feature, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable for, and compatible with, the neighborhood or the community. If the proposed use exceeds the Non-Residential Use Size limitations for the district in which the use is located, the following shall be considered:

(A) The intensity of activity in the district is not such that allowing the larger use will be likely to foreclose the location of other needed neighborhood-servicing uses in the area; and

(B) The proposed use will serve the neighborhood, in whole or in significant part, and the nature of the use requires a larger size in order to function; and

(C) The building in which the use is to be located is designed in discrete elements which respect the scale of development in the district; and

(2) Such use or feature as proposed will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity, or injurious to property, improvements or potential development in the vicinity, with respect to aspects including but not limited to the following:

(A) The nature of the proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

(B) The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading and of proposed alternatives to off-street parking, including provisions of car-share parking spaces, as defined in Section 166 of this Code.

(C) The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;

(D) Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs; and

(3) Such use or feature as proposed will comply with the applicable provisions of this Code and will not adversely affect the General Plan; and

(4) Such use or feature as proposed will provide development that is in conformity with the stated purpose of the applicable Use District; and

(5) The use or feature satisfies any criteria specific to the use or feature in Subsections (g),*et seq.* of this Section.

(d) **Conditions.** When considering an application for a Conditional Use as provided herein with respect to applications for development of "dwellings" as defined in Chapter 87 of the Administrative Code, the Commission shall comply with that Chapter which requires, among other things, that the Commission not base any decision regarding the development of “dwellings” in which “protected class” members are likely to reside on information which may be discriminatory to any member of a “protected class” (as all such terms are defined in Chapter 87 of the Administrative Code). In addition, when authorizing a Conditional Use as provided herein, the Planning Commission, or the Board of Supervisors on appeal, shall prescribe such additional conditions, beyond those specified in this Code, as are in its opinion necessary to secure the objectives of the Code. Once any portion of the Conditional Use authorization is utilized, all such conditions pertaining to such authorization shall become immediately operative. The violation of any condition so imposed shall constitute a violation of this Code and may constitute grounds for revocation of the Conditional Use authorization. Such conditions may include time limits for exercise of the Conditional Use authorization; otherwise, any exercise of such authorization must commence within a reasonable time.

(e) **Modification of Conditions.** Authorization of a change in any condition previously imposed in the authorization of a Conditional Use shall be subject to the same procedures as a new Conditional Use. Such procedures shall also apply to applications for modification or waiver of conditions set forth in prior stipulations and covenants relative thereto continued in effect by the provisions of Section 174 of this Code.

(f) **Conditional Use Abatement.** The Planning Commission may consider the possible revocation of a Conditional Use or the possible modification of or placement of additional conditions on a Conditional Use when the Planning Commission determines, based upon substantial evidence, that the applicant for the Conditional Use had submitted false or misleading information in the application process that could have reasonably had a substantial effect upon the decision of the Commission or the Conditional Use is not in compliance with a Condition of Approval, is in violation of law if the violation is within the subject matter jurisdiction of the Planning Commission, or operates in such a manner as to create hazardous, noxious, or offensive conditions enumerated in Section 202(c) if the violation is within the subject matter jurisdiction of the Planning Commission and these circumstances have not been abated through administrative action of the Director, the Zoning Administrator or other City authority. Such consideration shall be the subject of a public hearing before the Planning Commission but no fee shall be required of the applicant or the subject Conditional Use operator.

(1) **Public Hearing.** The Director of Planning or the Planning Commission may schedule a public hearing on Conditional Use abatement when the Director or Commission has obtained or received (A) substantial evidence submitted within one year of the effective date of the Conditional Use authorization that the applicant for the Conditional Use had submitted false or misleading information in the application process that could have reasonably had a substantial effect upon the decision of the Commission or (B) substantial evidence, submitted or received at any time while the Conditional Use authorization is effective, of a violation of conditions of approval, a violation of law, or operation which creates hazardous, noxious or offensive conditions enumerated in Section 202(c).

(2) **Notification.** The notice for the public hearing on a Conditional Use abatement shall be subject to the notification procedure described in Section 333 of this Code.

(3) **Consideration.** In considering a Conditional Use revocation, the Commission shall consider whether and how the false or misleading information submitted by the applicant could have reasonably had a substantial effect upon the decision of the Commission, or the Board of Supervisors on appeal, to authorize the Conditional Use, substantial evidence of how any required condition has been violated or not implemented or how the Conditional Use is in violation of the law if the violation is within the subject matter jurisdiction of the Planning Commission or operates in such a manner as to create hazardous, noxious or offensive conditions enumerated in Section 202(c) if the violation is within the subject matter jurisdiction of the Planning Commission. As an alternative to revocation, the Commission may consider how the use can be required to meet the law or the conditions of approval, how the hazardous, noxious or offensive conditions can be abated, or how the criteria of Section 303(c) can be met by modifying existing conditions or by adding new conditions which could remedy a violation.

(4) **Appeals.** A decision by the Planning Commission to revoke a Conditional Use, to modify conditions or to place additional conditions on a Conditional Use or a decision by the Planning Commission refusing to revoke or amend a Conditional Use, may be appealed to the Board of Supervisors within 30 days after the date of action by the Planning Commission pursuant to the provisions of Section 308.1(b). The Board of Supervisors may disapprove the action of the Planning Commission in an abatement matter by the same vote necessary to overturn the Commission's approval or denial of a Conditional Use. The Planning Commission's action on a Conditional Use abatement issue shall take effect when the appeal period is over or, upon appeal, when there is final action on the appeal.

(5) **Reconsideration.** The decision by the Planning Commission with respect to a Conditional Use abatement issue or by the Board of Supervisors on appeal shall be final and not subject to reconsideration within a period of one year from the effective date of final action upon the earlier abatement proceeding, unless the Director of Planning determines that:

(A) There is substantial new evidence of a new Conditional Use abatement issue that is significantly different than the issue previously considered by the Planning Commission; or

(B) There is substantial new evidence about the same Conditional Use abatement issue considered in the earlier abatement proceeding, this new evidence was not or could not be reasonably available at the time of the earlier abatement proceeding, and that new evidence indicates that the Commission's decision in the earlier proceeding has not been implemented within a reasonable time or raises significant new issues not previously considered by the Planning Commission. The decision of the Director of Planning regarding the sufficiency and adequacy of evidence to allow the reconsideration of a Conditional Use abatement issue within a period of one year from the effective date of final action on the earlier abatement proceeding shall be final.

(g) **Hotels and Motels.** With respect to applications for development of tourist hotels and motels, the Planning Commission shall consider, in addition to the criteria set forth in subsections (c) and (d) above:

(1) The impact of the employees of the hotel or motel on the demand in the City for housing, public transit, child-care, and other social services. To the extent relevant, the Commission shall also consider the seasonal and part-time nature of employment in the hotel or motel;

(2) The measures that will be taken by the project sponsor to employ residents of San Francisco in order to minimize increased demand for regional transportation; and

(3) The market demand for a hotel or motel of the type proposed.

(h) **Internet Services Exchange.**

(1) With respect to application for development of Internet Services Exchange as defined in Section 102, the Planning Commission shall, in addition to the criteria set forth in Subsection (c) above, find that:

(A) The intensity of the use at this location and in the surrounding neighborhood is not such that allowing the use will likely foreclose the location of other needed neighborhood-serving uses in the area;

(B) The building in which the use is located is designed in discrete elements, which respect the scale of development in adjacent blocks, particularly any existing residential uses;

(C) Rooftop equipment on the building in which the use is located is screened appropriately.

(D) The back-up power system for the proposed use will comply with all applicable Federal, State, regional and local air pollution controls.

(E) Fixed-source equipment noise does not exceed the decibel levels specified in the San Francisco Noise Control Ordinance.

(F) The building is designed to minimize energy consumption, such as through the use of energy-efficient technology, including without limitation, heating, ventilating and air conditioning systems, lighting controls, natural ventilation and recapturing waste heat, and as such commercially available technology evolves;

(G) The project sponsor has examined the feasibility of supplying and, to the extent feasible, will supply all or a portion of the building's power needs through on-site power generation, such as through the use of fuel cells or co-generation;

(H) The project sponsor shall have submitted design capacity and projected power use of the building as part of the conditional use application; and

(2) As a condition of approval, and so long as the use remains an Internet Services Exchange, the project sponsor shall submit to the Planning Department on an annual basis power use statements for the previous twelve-month period as provided by all suppliers of utilities and shall submit a written annual report to the Department of Environment and the Planning Department which shall state: (a) the annual energy consumption and fuel consumption of all tenants and occupants of the Internet Services Exchange; (b) the number of all diesel generators located at the site and the hours of usage, including usage for testing purposes; (c) evidence that diesel generators at the site are in compliance with all applicable local, regional, State, and Federal permits, regulations and laws; and (d) such other information as the Planning Commission may require.

(3) The Planning Department shall have the following responsibilities regarding Internet Services Exchanges:

(A) Upon the effective date of the requirement of a Conditional Use authorization for an Internet Services Exchange, the Planning Department shall notify property owners of all existing Internet Services Exchanges that the use has been reclassified as a conditional use;

(B) Upon the effective date of the requirement of a Conditional Use authorization for an Internet Services Exchange, the Planning Department shall submit to the Board of Supervisors and to the Director of the Department of Building Inspection a written report covering all existing Internet Services Exchanges and those Internet Services Exchanges seeking to obtain a Conditional Use authorization, which report shall state the address, assessor's block and lot, zoning classification, square footage of the Internet Services Exchange constructed or to be constructed, a list of permits previously issued by the Planning and/or Building Inspection Departments concerning the Internet Services Exchange, the date of issuance of such permits, and the status of any outstanding requests for permits from the Planning and/or Building Inspection Departments concerning Internet Services Exchange; and

(C) Within three years from the effective date of the requirement of a Conditional Use authorization for an Internet Services Exchange, the Planning Department, in consultation with the Department of Environment, shall submit to the Board of Supervisors a written report, which report shall contain the Planning Commission's evaluation of the effectiveness of the conditions imposed on Internet Services Exchanges, and whether it recommends additional or modified conditions to reduce energy and fuel consumption, limit air pollutant emissions, and enhance the compatibility of industrial uses, such as Internet Services Exchanges, located near or in residential or commercial districts.

(i)* **Large-Scale Retail Uses.** With respect to applications for the establishment of large-scale retail uses under Section 121.6, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall consider the following:

(1) The extent to which the retail use's parking is planned in a manner that creates or maintains active street frontage patterns;

(2) The extent to which the retail use is a component of a mixed-use project or is designed in a manner that encourages mixed-use building opportunities;

(3) The shift in traffic patterns that may result from drawing traffic to the location of the proposed use;

(4) The impact that the employees at the proposed use will have on the demand in the City for housing, public transit, childcare, and other social services; and

(5) An economic impact study. The Planning Department shall prepare an economic impact study using qualified City staff or shall select a consultant from a pool of pre-qualified consultants to prepare the economic impact study required by this subsection (i)(5). The analysis, in the form of a study, shall be considered by the Planning Commission in its review of the application. The applicant shall bear the cost of paying the consultant for the consultant’s work preparing the economic impact study, and any necessary documents prepared as part of that study. The study shall evaluate the potential economic impact of the applicant’s proposed project, including:

(A) **Employment Analysis.** The report shall include the following employment information: a projection of both construction-related and permanent employment generated by the proposed project, and a discussion of whether the employer of the proposed project will pay a living wage, inclusive of non-salary benefits expected to be provided, relative to San Francisco's cost of living.

(B) **Fiscal Impact.** The report shall itemize public revenue created by the proposed project and public services needed because of the proposed project, relative to net fiscal impacts to the General Fund. The impacts to the City's public facilities and infrastructure shall be estimated using the City's current assumptions in existing nexus studies (including area plan, transit, open space in-lieu fee and other impact fees), and should account for any contributions the proposed project would make through such impact fee payments.

(C) **Leakage Analysis Study.** This portion of the report shall be twofold: both quantitative and qualitative. The quantitative

portion shall provide an analysis of whether the proposed project will result in a net increase or decrease in the capture of spending by area residents on items that would otherwise be purchased outside the area. The area to be studied for potential economic impacts of the proposed project shall be determined by the City in consultation with the expert conducting the study as different sizes of study areas would be pertinent depending on a multitude of factors, including but not limited to, size and type of the proposed store. This quantitative leakage analysis should be paired with a qualitative assessment of whether the proposed use would complement existing merchandise selection in the area by adding greater variety of merchandise, bolstering the strength of an existing retail cluster, or matching evolving consumer preferences.

(j) **Change in Use or Demolition of Movie Theater Uses.** With respect to a change in use or demolition of a Movie Theater use pursuant to Section 202.4, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall make the following findings:

(1) Preservation of a Movie Theater use is no longer economically viable and cannot effect a reasonable economic return to the property owner. For purposes of defining "reasonable economic return," the Planning Commission shall be guided by the criteria for Fair Return on Investment set forth in Section 102;

(2) The change in use or demolition of the Movie Theater use will not undermine the economic diversity and vitality of the surrounding District; and

(3) The resulting project will preserve the architectural integrity of important historic features of the movie theater use affected.

(k) **Relocation of Existing General Advertising Signs pursuant to a General Advertising Sign Company Relocation Agreement.**

(1) Before the Planning Commission may consider an application for a Conditional Use to relocate an existing lawfully permitted General Advertising Sign as authorized by Section 611 of this Code, the applicant sign company must have:

(A) Obtained a current Relocation Agreement approved by the Board of Supervisors under Section 2.21 of the San Francisco Administrative Code that covers the sign or signs proposed to be relocated; and

(B) Submitted to the Department a current sign inventory, site map, and the other information required under Section 604.2 of this Code; and

(C) Obtained the written consent to the relocation of the sign from the owner of the property upon which the existing sign structure is erected.

(D) Obtained a permit to demolish the sign structure at the existing location.

(2) The Department, in its discretion, may review in a single Conditional Use application all signs proposed for relocation by a General Advertising Sign company or may require that one or more of the signs proposed for relocation be considered in a separate application or applications. Prior to the Commission's public hearing on the application, the Department shall have verified the completeness and accuracy of the General Advertising Sign company's sign inventory.

(3) Only one sign may be erected in a new location, which shall be the same square footage or less than the existing sign proposed to be relocated. In no event may the square footage of several existing signs be aggregated in order to erect a new sign with greater square footage; provided however the square footage of one or more existing signs may be disaggregated in order to erect multiple smaller signs with lesser total square footage.

(4) In addition to applicable criteria set forth in subsection (c) above, the Planning Commission shall consider the size and visibility of the signs proposed to be located as well as the following factors in determining whether to approve or disapprove a proposed relocation:

(A) The factors set forth in this subsection (A) shall weigh in favor of the Commission's approval of the proposed relocation site:

(i) The sign or signs proposed for relocation are lawfully existing but are not in conformity with the sign regulations that existed prior to the adoption of Proposition G on March 5, 2002.

(ii) The sign or signs proposed for relocation are on a City list, if any, of priorities for sign removal or signs preferred for relocation.

(iii) The sign or signs proposed for relocation are within, adjacent to, or visible from property under the jurisdiction of the San Francisco Port Commission, the San Francisco Unified School District, or the San Francisco Recreation and Park Commission.

(iv) The sign or signs proposed for relocation are within, adjacent to, or visible from an Historic District or conservation district designated in Article 10 or Article 11 of the Planning Code.

(v) The sign or signs proposed for relocation are within, adjacent to, or visible from a zoning district where general advertising signs are prohibited.

(vi) The sign or signs proposed for relocation are within, adjacent to, or visible from a designated view corridor.

(B) The factors set forth in this subsection (k)(4)(B) shall weigh against the Commission's approval of the proposed relocation:

(i) The sign or signs proposed for relocation are or will be obstructed, partially obstructed, or removed from public view by another structure or by landscaping.

(ii) The proposed relocation site is adjacent to or visible from property under the jurisdiction of the San Francisco Port Commission, the San Francisco Unified School District, or the San Francisco Recreation and Park Commission.

(iii) The proposed relocation site is adjacent to or visible from an Historic District or conservation district designated in Article 10 or Article 11 of the Planning Code.

(iv) The proposed relocation site is within, adjacent to, or visible from a zoning district where General Advertising Signs are prohibited.

(v) The proposed relocation site is within, adjacent to, or visible from a designated view corridor.

(vi) There is significant neighborhood opposition to the proposed relocation site.

(5) In no event may the Commission approve a relocation where:

(A) The sign or signs proposed for relocation have been erected, placed, replaced, reconstructed, or relocated on the property, or intensified in illumination or other aspect, or expanded in area or in any dimension in violation of Article 6 of this Code or without a permit having been duly issued; or

(B) The proposed relocation site is not a lawful location under Planning Code Section 611(c)(2); or

(C) The sign in its new location would exceed the size, height or dimensions, or increase the illumination or other intensity of the sign at its former location; or

(D) The sign in its new location would not comply with the Code requirements for that location as set forth in Article 6 of this Code; or

(E) The sign has been removed from its former location; or

(F) The owner of the property upon which the existing sign structure is erected has not consented in writing to the relocation of the sign.

(6) The Planning Commission may adopt additional criteria for relocation of General Advertising Signs that do not conflict with this Section 303(k) or Section 611 of this Code.

(l) **Change in Use or Demolition of General Grocery Uses.** With respect to a change in use or demolition of General Grocery use which use exceeds 5,000 gross square feet pursuant to Section 202.3 of this Code, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall make the following findings:

(1) Preservation of a General Grocery use is no longer economically viable and cannot effect a reasonable economic return to the property owner. The Commission may disregard the above finding if it finds that the change in use or replacement structure in the case of demolition will contain a General Grocery that is of a sufficient size to serve the shopping needs of nearby residents and offers comparable services to the former General Grocery store. For purposes of defining “reasonable economic return,” the Planning Commission shall be guided by the criteria for Fair Return on Investment set forth in Section 102; and

(2) The change in use or demolition of the General Grocery use will not undermine the economic diversity and vitality of the surrounding neighborhood.

(m) **Tobacco Paraphernalia Establishments.**

(1) With respect to a Tobacco Paraphernalia Establishment, as defined in Section 102 of this Code, in addition to the criteria set forth in Subsections (c) and (d) above, the Commission shall make the following findings:

(A) The concentration of such establishments in the particular zoning district for which they are proposed does not appear to contribute directly to peace, health, safety, and general welfare problems, including drug use, drug sales, drug trafficking, other crimes associated with drug use, loitering, and littering, as well as traffic circulation, parking, and noise problems on the district's public streets and lots;

(B) The concentration of such establishments in the particular zoning district for which they are proposed does not appear to adversely impact the health, safety, and welfare of residents of nearby areas, including fear for the safety of children, elderly and disabled residents, and visitors to San Francisco; and

(C) The proposed establishment is compatible with the existing character of the particular district for which it is proposed.

(n) **Massage Establishments.** With respect to Massage Establishments that are subject to Conditional Use authorization, in addition to the criteria set forth in subsection (c) above, the Commission shall make the following findings:

(1) Whether the use’s façade is transparent and open to the public. Permanent transparency and openness are preferable. Elements that lend openness and transparency to a façade include:

(A) active street frontage of at least 25 feet in length where 75% of that length is devoted to entrances to commercially used space or windows at the pedestrian eye-level;

(B) windows that use clear, untinted glass, except for decorative or architectural accent;

(C) any decorative railings or decorative grille work, other than wire mesh, which is placed in front of or behind such windows, should be at least 75% open to perpendicular view and no more than six feet in height above grade;

(2) Whether the use includes pedestrian-oriented lighting. Well lit establishments where lighting is installed and maintained along all public rights-of-way adjacent to the building with the massage use during the post-sunset hours of the massage use are encouraged:

(3) Whether the use is reasonably oriented to facilitate public access. Barriers that make entrance to the use more difficult than to an average service-provider in the area are to be strongly discouraged. These include (but are not limited to) foyers equipped with double doors that can be opened only from the inside and security cameras.

Exceptions. A Massage Establishment shall not require a Conditional Use authorization if the Massage Establishment satisfies one or more of the following conditions:

(1) The massage use is accessory to a Principal Use, if the massage use is accessed by the Principal Use and the Principal Use is a Hotel, not including a Residential Hotel; a Personal Service; a Health Service; or an Institutional Use as defined in this Code.

(2) The only massage service provided is Chair/Foot Massage, such service is visible to the public, and customers are fully clothed at all times.

(o) **Eating and Drinking Uses.** With regard to a Conditional Use authorization application for a Restaurant, Limited-Restaurant and Bar uses the Planning Commission shall consider, in addition to the criteria set forth in subsection (c) above, the existing concentration of eating and drinking uses in the area. Such concentration should not exceed 25% of the total commercial frontage as measured in linear feet within the immediate area of the subject site except as otherwise provided in this subsection (o). The concentration of eating and drinking uses in the Polk Street Neighborhood Commercial District shall not exceed 35% of the total commercial frontage as measured in linear feet within the immediate area of the subject site. For the purposes of this Section 303 of the Code, the immediate area shall be defined as all properties located within 300' of the subject property and also located within the same zoning district.

(p) **Adult Business, Adult Sex Venue, Nighttime Entertainment, and General Entertainment Uses.** With respect to Conditional Use authorization applications for Adult Business, Adult Sex Venue, Nighttime Entertainment, and General Entertainment uses, such use or feature shall meet the following conditions:

(1) All Nighttime Entertainment uses shall comply with the Entertainment Commission's Good Neighbor Policy.

(2) The Planning Commission may authorize Hours of Operation that exceed those principally permitted for the zoning district in which the use is located, provided that:

(A) facts presented are such to establish that the use will be operated in such a way as to minimize disruption to residences in and around the district with respect to noise and crowd control; and

(B) the proposed use shall not operate outside the Conditionally Permitted Hours of Operation for the zoning district.

(3) If the proposed use is located in a Cultural District established under Administrative Code Section 107, the Planning Commission shall consider the purpose and goals established in Section 107.2 as well as any recommendations set forth in the Cultural, History, Housing, and Economic Stability Strategy report for the district if one has been adopted pursuant to Section 107.4.

(4) The action of the Planning Commission approving a Conditional Use does not take effect until the appeal period is over or while the approval is under appeal.

(5) If the use is an Adult Business, it shall not be located within 1,000 feet of another such use.

(q) **Power Plants.** The controls of this Subsection shall apply to all Power Plants in M-1, M-2, and PDR-1-G, and PDR-2 Districts, including any intensification of a Power Plants as described in Section 178(c)(2).

(1) **Criteria.** In acting on any application for Conditional Use authorization for a Power Plant, the Commission shall consider the conditional use authorization requirements set forth in Subsection (c) above and, in addition, shall only approve an application for a Conditional Use authorization if facts are presented to establish that, on the basis of the record before the Commission:

(A) The benefits to the City's energy system resulting from the energy generated by the proposed power plant cannot be obtained in a reasonable time from a technically and economically feasible power plant and/or energy conservation project that would have materially fewer potential environmental impacts considering, but not limited to, the following: (i) Emissions of criteria air pollutants and greenhouse gas emissions; (ii) Stormwater and wastewater discharges; and (iii) noise and vibration impacts.

(B) A newly proposed Power Plant use would not directly and adversely impact existing or reasonably foreseeable adjoining land uses, or, as applied to a prior nonconforming use, the extension of the power plant use or the increase in intensity of the use would not result in increased direct and adverse impacts on existing or reasonably foreseeable adjoining land uses; and

(C) Granting Conditional Use authorization would not reasonably be expected to leave known contamination in place in such a way that would prolong or increase public health risks associated with such contamination at levels inconsistent with a risk-based remediation consistent with the proposed power plant use; and

(D) Granting Conditional Use authorization would not reasonably be expected to preclude future redevelopment and reuse of the property for non-power plant uses.

(2) **Written Findings.** The Planning Commission shall make detailed written findings explaining the basis for its decision under this Section.

(3) **Severability**. In the event that a court or agency of competent jurisdiction holds that Federal or State law, rule, or regulation invalidates any clause, sentence, paragraph of this Section or the application thereof to any person or circumstances, it is intended that the court or agency sever such clause, sentence, paragraph or section so that the remainder of this Section shall remain in effect.

(r) **Development of Large Lots in RTO and RTO-M Districts.** In order to promote, protect, and maintain a scale of development that is appropriate to each district and compatible with adjacent buildings, new construction or significant enlargement of existing

buildings on lots of the same size or larger than the square footage stated in Table 209.4 under Large Project Review shall be permitted only as Conditional Uses subject to the provisions set forth in this Section of this Code.

In addition to the criteria of Section 303(c)(1) of this Code, the Planning Commission shall consider the extent to which the following criteria are met:

(1) The mass and articulation of the proposed structures are compatible with the intended scale of the district.

(2) For development sites greater than ½-acre, the extension of adjacent alleys or streets onto or through the site, and/or the creation of new publicly-accessible streets or alleys through the site as appropriate, in order to break down the scale of the site, continue the surrounding existing pattern of streets and alleys, and foster beneficial pedestrian and vehicular circulation.

(3) The site plan, including the introduction of new streets and alleys, the provision of open space and landscaping, and the articulation and massing of buildings, is compatible with the goals and policies of the applicable Area Plan in the General Plan.

(s) **Wireless Telecommunications Services (WTS) Facilities.**

(1) Due to the potential modification of WTS Facilities over time and the resulting impacts on a neighborhood's aesthetics and character, as well as other changes in neighborhood character over time, a Conditional Use Authorization for a WTS Facility shall have a duration of ten years from the date of approval. If any administrative appeal is taken from the Conditional Use Authorization, the ten-year period shall run from the date the Authorization is upheld on administrative appeal.

(2) The Authorization may be renewed, without limitation, for subsequent time periods of ten years, subject to the following:

(A) The renewal application is filed with the Planning Department prior to expiration, but no earlier than 24 months prior to expiration.

(B) For any Conditional Use Authorization for a WTS Facility, the Planning Commission may, in granting the Conditional Use Authorization, determine that the Director shall review and determine whether to grant any application for renewal of the Conditional Use Authorization for an additional ten-year period.

(C) This provision shall not apply to Conditional Use Authorizations granted prior to the effective date of this Subsection (s). However, applications for Conditional Use Authorizations to modify existing WTS Facilities that are granted on or after the effective date of this Subsection (s) are subject to this Subsection (s).

(t) **Non-accessory Parking.** When considering a Conditional Use application for non-accessory parking for a specific use or uses, the Planning Commission shall find affirmatively that the project satisfies the following criteria, in addition to those of subsection 303(c), as applicable.

(1) In all zoning districts, the Planning Commission shall apply the following criteria:

(A) Demonstration that trips to the use or uses to be served, and the apparent demand for additional parking, cannot be satisfied by the amount of parking classified by this Code as accessory, by transit service which exists or is likely to be provided in the foreseeable future, by car pool arrangements, by more efficient use of existing on-street and off-street parking available in the area, and by other means;

(B) Demonstration that the apparent demand for additional parking cannot be satisfied by the provision by the applicant of one or more car-share parking spaces in addition to those that may already be required by Section 166 of this Code;

(C) The absence of potential detrimental effects of the proposed parking upon the surrounding area, especially through unnecessary demolition of sound structures, contribution to traffic congestion, or disruption of or conflict with transit services, walking, and cycling;

(D) In the case of uses other than housing, limitation of the proposed parking to short-term occupancy by visitors rather than long-term occupancy by employees; and

(E) Availability of the proposed parking to the general public at times when such parking is not needed to serve the use or uses for which it is primarily intended.

(2) **For Non-Accessory Parking in Mixed Use Districts:**

(A) A non-accessory garage permitted with Conditional Use may not be permitted under any condition to provide additional accessory parking for specific residential or non-residential uses if the number of spaces in the garage, in addition to the accessory parking permitted in the subject project or building, would exceed those amounts permitted as-of-right or as a Conditional Use by Section 151.1.

(B) **Criteria.**

(i) Such facility shall meet all the design requirements for setbacks from facades and wrapping with active uses at all levels per the requirements of Section 145.1; and

(ii) Such parking shall not be accessed from any protected Transit or Pedestrian Street described in Section 155(r); and

(iii) Such parking garage shall be located in a building where the ratio of gross square footage of parking uses to other uses that are permitted or Conditionally permitted in that district is not more than 1 to 1; and

(iv) Such parking shall be available for use by the general public on equal terms and shall not be deeded or made available

exclusively to tenants, residents, owners, or users of any particular use or building except in cases that such parking meets the criteria of subsection (C) or (D) below; and

(v) Such facility shall provide spaces for car sharing vehicles per the requirements of Section 166 and bicycle parking per the requirements of Sections 155.1 and 155.2; and

(vi) Such facility, to the extent open to the public per subsection (iv) above, shall meet the pricing requirements of Section 155(g) and shall generally limit the proposed parking to short-term occupancy rather than long-term occupancy; and

(vii) Vehicle movement on or around the facility does not unduly impact pedestrian spaces or movement, transit service, bicycle movement, or the overall traffic movement in the district; and

(viii) Such facility and its access does not diminish the quality and viability of existing or planned streetscape enhancements.

(C) **Parking of Fleet Vehicles.** Parking of fleet of commercial or governmental vehicles intended for work-related use by employees and not used for parking of employees' personal vehicles may be permitted with Conditional Use provided that the Commission affirmatively finds all of the above criteria except criteria (iv) and (vi).

(D) **Pooled Residential Parking.** Non-accessory parking facilities limited to use by residents, tenants, or visitors of specific off-site development(s) may be permitted with Conditional Use, provided that the Commission affirmatively finds all of the above criteria under (B) except criteria (iv) and (vi), and provided further that the proposed parking on the subject lot would not exceed the maximum amounts permitted by Section 151.1 with Conditional Use or Exceptions under Sections 309.1 and 329 as accessory for the uses in the off-site residential development. For the purpose of this subsection, an "off-site development" is a development which is existing or has been approved by the Planning Commission or Planning Department in the previous 12 months, is located on a lot other than the subject lot, and does not include any off-street parking. A Notice of Special Restrictions shall be recorded on both the off-site and subject development lot indicating the allocation of the pooled parking.

(3) **For Non-Accessory Parking in C-3, RC, NCT, and RTO Districts:**

(A) The rate structure of Section 155(g) shall apply;

(B) The project sponsor has produced a survey of the supply and utilization of all existing publicly-accessible parking facilities, both publicly and privately owned, within one-half mile of the subject site, and has demonstrated that such facilities do not contain excess capacity, including via more efficient space management or extended operations;

(C) In the case of expansion of existing facilities, the facility to be expanded has already maximized capacity through use of all feasible space efficient techniques, including valet operation or mechanical stackers;

(D) The proposed facility meets or exceeds all relevant urban design requirements and policies of this Code and the General Plan regarding wrapping with active uses and architectural screening, and such parking is not accessed from any frontages protected in Section 155(r);

(E) Non-accessory parking facilities shall be permitted in new construction only if the ratio between the amount of Occupied Floor Area of principally or conditionally-permitted non- parking uses to the amount of Occupied Floor Area of parking is at least two to one;

(F) The proposed facility shall dedicate no less than 5% of its spaces for short-term, transient use by car share vehicles as defined in Section 166, vanpool, rideshare, or other co-operative auto programs, and shall locate these vehicles in a convenient and priority location. These spaces shall not be used for long-term storage or to satisfy the requirement of Section 166, but rather are intended for use by short-term visitors and customers. Parking facilities intended for sole and dedicated use as long-term storage for company or government fleet vehicles, and not to be available to the public nor to any employees for commute purposes, are not subject to this requirement;

(G) For new or expanding publicly owned non-accessory parking facilities in the C-3, RC, NCT, and RTO Districts, the following shall also apply:

(i) Expansion or implementation of techniques to increase utilization of existing public parking facilities in the vicinity has been explored in preference to creation of new facilities, and has been demonstrated to be infeasible;

(ii) The City has demonstrated that all major institutions (cultural, educational, government) and employers in the area intended to be served by the proposed facility have Transportation Demand Management programs in place to encourage and facilitate use of public transit, carpooling, car sharing, bicycling, walking, and taxis;

(iii) The City has demonstrated that conflicts with pedestrian, cycling, and transit movement resulting from the placement of driveways and ramps, the breaking of continuity of shopping facilities along sidewalks, and the drawing of traffic through areas of heavy pedestrian concentration, have been minimized, and such impacts have been mitigated to the fullest extent possible; and

(iv) The proposed parking conforms to the objectives and policies of the General Plan and any applicable area plans, and is consistent with the City's transportation management, sustainability, and climate protection goals.

(u) **Accessory Parking Above That Principally Permitted.**

(1) **Residential Uses.**

(A) In granting approval for parking accessory to Residential Uses above that principally permitted in Table 151.1, the Planning Commission shall make the following affirmative findings in addition to those stated in Section 303(c):

(i) For projects with 50 units or more, all residential accessory parking in excess of 0.5 parking spaces for each Dwelling Unit shall be stored and accessed by mechanical stackers or lifts, valet, or other space-efficient means that allow more space above-ground for housing, maximizes space efficiency, and discourages use of vehicles for commuting or daily errands. The Planning Commission may authorize the request for additional parking notwithstanding that the project sponsor cannot fully satisfy this requirement provided that the project sponsor demonstrates hardship or practical infeasibility (such as for retrofit of existing buildings) in the use of space-efficient parking given the configuration of the parking floors within the building and the number of independently accessible spaces above 0.5 spaces per unit is de minimus and subsequent valet operation or other form of parking space management could not significantly increase the capacity of the parking space above the maximums in Table 151.1;

(ii) All parking meets the active use and architectural screening requirements in Section 145.1 and the project sponsor is not requesting any exceptions or variances requiring such treatments elsewhere in this Code;

(iii) Demonstration that trips to the use or uses to be served, and the apparent demand for additional parking, cannot be satisfied by the amount of parking classified by this Code as accessory, by transit service which exists or is likely to be provided in the foreseeable future, by carpool arrangements, by more efficient use of existing on-street and off-street parking available in the area, and by other means;

(iv) Demonstration that the apparent demand for additional parking cannot be satisfied by the provision by the applicant of one or more car-share parking spaces in addition to those that may already be required by Section 166 of this Code;

(v) The absence of potential detrimental effects of the proposed parking upon the surrounding area, especially through unnecessary demolition of sound structures, contribution to traffic congestion, or disruption of or conflict with transit services, walking, and cycling; and

(vi) Accommodating excess accessory parking does not degrade the overall urban design quality of the project proposal nor diminish the quality and viability of existing or planned streetscape enhancements.

(B) **Required Additional Conditions.** Additionally, in granting approval for such accessory parking above that principally permitted, the Commission may require the property owner to pay the annual membership fee to a certified car-share organization, as defined in Section 166(b)(2), for any resident of the project who so requests and who otherwise qualifies for such membership, provided that such requirement shall be limited to one membership per Dwelling Unit, when the following findings are made:

(i) that the project encourages additional private-automobile use, thereby creating localized transportation impacts for the neighborhood; and

(ii) that these localized transportation impacts may be lessened for the neighborhood by the provision of car-share memberships to residents.

(2) **Non-Residential Uses.**

(A) **Criteria.** In granting such Conditional Use, the Planning Commission shall make the following affirmative findings according to the uses to which the proposed parking is accessory:

(i) Vehicle movement on or around the project does not unduly impact pedestrian spaces or movement, transit service, bicycle movement, or the overall traffic movement in the district;

(ii) Accommodating excess accessory parking does not degrade the overall urban design quality of the project proposal;

(iii) All above-grade parking is architecturally screened and lined with active uses according to the standards of Section 145.1, and the project sponsor is not requesting any exceptions or variances requiring such treatments elsewhere in this Code; and

(iv) Excess accessory parking does not diminish the quality and viability of existing or planned streetscape enhancements.

(B) **Conditions.** All Non-Residential Uses exceeding 20,000 square feet shall be subject to the following conditions:

(i) Projects that provide more than 10 spaces for non-residential uses must dedicate 5% of these spaces, rounded down to the nearest whole number, to short-term, transient use by vehicles from certified car sharing organizations per Section 166, vanpool, rideshare, taxis, or other co-operative auto programs. These spaces shall not be used for long-term storage nor satisfy the requirement of Section 166, but rather to park the vehicles during trips to commercial uses. These spaces may be used by shuttle or delivery vehicles used to satisfy Subsection (ii);

(ii) Retail uses larger than 20,000 square feet including but not limited to grocery, hardware, furniture, consumer electronics, greenhouse or nursery, and appliance stores, which sell merchandise that is impractical to carry on public transit, shall offer, at minimal or no charge to its customers, door-to-door delivery service and/or shuttle service. This is encouraged, but not required, for retail uses less than 20,000 square feet;

(iii) Parking shall be limited to short-term use only; and

(iv) Parking shall be available to the general public at times when such parking is not needed to serve the use or uses to which it is accessory.

(v) **Affordable Housing Bonus Projects.** The purpose of this Section 303(v) is to ensure that all Analyzed State Density Bonus Program Projects under Section 206.5 are reviewed in coordination with priority processing available for certain projects with greater levels of affordable housing. While most projects in the Program will likely be somewhat larger than their surroundings in order to facilitate higher levels of affordable housing, the Planning Commission and Department shall ensure that each project is consistent with the Affordable Housing Bonus Design Guidelines and any other applicable design guidelines, as adopted and periodically amended by

the Planning Commission, so that projects respond to their surrounding context, while still meeting the City's affordable housing goals.

(1) **Planning Commission Design Review:** The Planning Commission shall review and evaluate all physical aspects of a State Analyzed Project at a public hearing. The Planning Commission recognizes that most qualifying projects will need to be larger in height and mass than surrounding buildings to achieve the Affordable Housing Bonus Program's affordable housing goals. However, the Planning Commission may, consistent with the Affordable Housing Bonus Program Design Guidelines, and any other applicable design guidelines, and upon recommendation from the Planning Director, make minor modifications to a project to reduce the impacts of such differences in scale.

(2) **Additional Criteria.** In addition to the criteria set forth in subsection (c)(2), the Planning Commission shall consider the extent to which the following criteria are met:

(A) whether the project would require the demolition of an existing building;

(B) whether the project would remove existing commercial or retail uses;

(C) If the project would remove existing commercial or retail uses, how recently the commercial or retail uses were occupied by a tenant or tenants;

(D) whether the project includes commercial or retail uses;

(E) whether there is an adverse impact on the public health, safety, and general welfare due to the loss of commercial or retail uses in the district where the project is located; and

(F) whether any existing commercial or retail use has been designated, or is eligible to be designated, as a Legacy Business under Administrative Code Section 2A.242; or is a formula retail business.

(3) In no case may a project receive a site permit or any demolition permit prior to 18 months from the date of written notification required by 206.5(d)(7).

(w) **Cannabis Retail.** With respect to any application for the establishment of a new Cannabis Retail Use, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall consider the geographic distribution of Cannabis Retail Uses throughout the City, the concentration of Cannabis Retail and Medical Cannabis Dispensary Uses within the general proximity of the proposed Cannabis Retail Use, the balance of other goods and services available within the general proximity of the proposed Cannabis Retail Use, any increase in youth access and exposure to cannabis at nearby facilities that primarily serve youth, and any proposed measures to counterbalance any such increase.

(x) **Medical Cannabis Dispensaries.** With respect to any application for the establishment of a new Medical Cannabis Dispensary Use, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall consider the concentration of Cannabis Retail and Medical Cannabis Dispensary Uses within the general proximity the proposed Medical Cannabis Dispensary Use.

(y) **Curb Cuts on Restricted Streets.** With respect to an application for a new or expanded curb cut on street frontages subject to Section 155(r), the Planning Commission shall affirmatively find, in addition to those findings in subsections 303(c) and (d) above, that the project meets one or more of the following criteria:

(1) That the restriction on curb cuts at this location would substantially affect access to or operations of emergency services;

(2) That the proposed land use(s) requires off-street parking or loading for disability access under a local, State, or federal law or has an extraordinary need to provide off-street parking or loading for a General Grocery Use, Institutional Use, or PDR Use; and/or

(3) The proposed use necessitates on-site loading spaces in order to prevent a significant negative impact on Muni operations, the safety of pedestrian, cyclists, or traffic hazards.

(z) **Liquor Stores.** With regard to the Conditional Use application for a Liquor Store use, the Planning Commission shall consider, in addition to the criteria set forth in subsection (c) above:

(1) the existing concentration of Liquor Store uses within 300 feet of the proposed location; and

(2) the availability of General Grocery or Specialty Grocery stores in the area selling alcoholic beverages as well as a range of foods.

(aa) **Change in Use or Demolition of Residential Care Facility.** With respect to a change of use from or demolition of a Residential Care Facility, as defined in Sections 102 and 890.50(e) of the Planning Code, including a Residential Care Facility established with or without the benefit of any permits required under the Municipal Code, in addition to the criteria set forth in subsections (c) and (d) of this Section 303, the Commission shall take into account the following factors when considering a Conditional Use Authorization for the change of use or demolition of a Residential Care Facility:

(1) Information provided by the Department of Public Health, the Human Services Agency, the Department of Disability and Aging Services, the Golden Gate Regional Center, and/or the San Francisco Long-Term Care Coordinating Council with regard to the population served, nature and quality of services provided, and capacity of the existing Residential Care Facility;

(2) Data on available beds at licensed Residential Care Facilities within a one-mile radius of the site, and assessment from any of the above agencies regarding whether these available beds are sufficient to serve the need for residential care beds in the neighborhoods served by the Residential Care Facility proposed for a change of use or demolition, and in San Francisco;

(3) Whether the Residential Care Facility proposed for a change of use or demolition will be relocated or its capacity will be

replaced at another Residential Care Facility Use, and whether such relocation or replacement is practically feasible; and

(4) Whether the continued operation of the existing Residential Care Facility by the current operator is practically feasible and whether any other licensed operator or any of the above agencies has been contacted by the applicant seeking the change of use or demolition, or has expressed interest in continuing to operate the facility.

(bb) **Social Service and Philanthropic Facilities in Chinatown Visitor Retail, Chinatown Residential Neighborhood Commercial, and Chinatown Community Business Districts.** With regard to a Conditional Use application for a Social Service or Philanthropic Facility use pursuant to Section 121.4 of this Code, in addition to consideration of the criteria set forth in subsection (c) above, the Planning Commission shall, in order to grant a Conditional Use Authorization, find that the proposed use will primarily serve the Chinatown neighborhood.

(cc) **Parcel Delivery Services.**

(1) **Criteria.** With respect to a Conditional Use application for Parcel Delivery Service use as defined in Section 102 of the Planning Code that is less than 5,000 square feet in size, the Planning Commission shall consider the criteria in subsections (c) and (d) above. With respect to a Conditional Use application for Parcel Delivery Service use that is 5,000 square feet or larger, in addition to the criteria in subsections (c) and (d) above, the Planning Commission shall consider the following:

(A) The extent to which the use will adversely impact traffic patterns and queuing times and add total vehicle miles traveled, including by delivery drivers and couriers operating to and from the site;

(B) The greenhouse gas emissions resulting from operating of the site, including from indirect sources such as courier and delivery vehicles;

(C) The impact that the use will have on public transit, public safety, and emergency response, with particular attention paid to the rate of workplace injury associated with the use and moving violations and traffic accidents requiring public safety or emergency service response; and

(D) The impact on educational institutions located near the site; and

(E) An economic impact study. The Planning Department shall prepare an economic impact study using City staff or shall, consistent with the Charter, select a consultant from a pool of pre-qualified consultants to prepare the economic impact study required by this subsection (cc). The economic impact study shall be considered by the Planning Commission in its review of the application. In the event a consultant is used, the applicant shall bear the cost of paying the consultant for their work preparing the economic impact study, and any necessary documents prepared as part of that study. The study shall evaluate the potential economic impact of the applicant's proposed project, including:

(i) **Employment Analysis.** The report shall include the following employment information: a projection of both construction-related and permanent employment generated by the proposed project, and a discussion of whether the employer of the proposed project will pay a living wage, inclusive of non-salary benefits expected to be provided, relative to San Francisco's cost of living. The employment analysis shall also include a discussion of the past and current employment practices of the proposed operator, if any, including but not limited to artificial intelligence utilization and autonomous vehicles driven in ratio of human-operated activities.

(ii) **Fiscal Impact.** The report shall itemize public revenue created by the proposed project and public services needed because of the proposed project, relative to net fiscal impacts to the General Fund. The impacts to the City's public facilities and infrastructure shall be estimated using the City's current assumptions in existing nexus studies (including area plan, transit, open space in-lieu fee and other impact fees), and should account for any contributions the proposed project would make through such impact fee payments.

(2) **Required Additional Conditions.** All Parcel Delivery Service facilities shall be subject to at least the following conditions of project approval:

(A) **Electrification.** Facilities shall include necessary infrastructure and electrical capacity to accommodate and charge electric vehicles—including electric heavy-duty delivery trucks, employee vehicles, and all other zero-emission vehicles accessing the facility; power refrigeration for refrigerated spaces; and serve any other processes that would otherwise rely upon fossil fuel combustion. Facilities shall install battery storage to address power disruption. Diesel back-up generators shall only be permitted if the facility demonstrates battery storage is infeasible and shall meet CARB's Tier 4 emission standards or meet the most stringent in-use standard, whichever has the least emissions.

(B) **Idling of Vehicles.** To reduce idling emissions from transport trucks, the facility shall have signage placed at truck access points, loading docks, and truck parking areas that clearly notes idling for more than three minutes is strictly prohibited on the subject property. The facility shall fund placement of similar signs installed by the City in the adjacent streets used for access. Each sign placed outside the property should note the California Air Resources Board idling prohibitions on the adjacent streets and include telephone numbers of the building facilities manager and the California Air Resources Board to report violations. All signage should be made of weather-proof materials. All site and architectural plans submitted to the City shall note the locations of these signs.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 69-87, App. 3/13/87; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90; Ord. 47-92, App. 2/14/92; Ord. 304-99, File No. 990495, App. 12/3/99; Ord. 311-99, File No. 991585, App. 12/3/99; Ord. 169-00, File No. 991953, App. 7/7/2000; Ord. 259-00, File No. 001422, App. 11/17/2000; Ord. 77-02, File No. 011448, App. 5/24/2002; Ord. 43-03, File No. 021772, App. 4/3/2003; Ord. 62-04, File No. 031501, App. 4/9/2004; Ord. 89-04, File No. 031463, App. 5/27/2004; Ord. 270-04, File No. 041070, App. 11/9/2004; Ord. 140-06, File No. 052921, App. 6/22/2006; Ord. 298-06, File No. 061261, App. 12/12/2006; Ord. 72-08, File No. 071157, App. 4/3/2008; Ord. 112-08, File No. 080095, App. 6/30/2008; Ord. 244-08, File No. 080567, App. 10/30/2008; Ord. 245-08, File No. 080696; Ord. 139-09, File No. 090402, App. 7/2/2009; Ord. 140-11, File No. 110482, App. 7/5/2011, Eff. 8/4/2011; Ord. 75-12 , File No. 120084, App. 4/23/2012, Eff. 5/23/2012; Ord. 106-12 , File No. 120047, App. 6/22/2012, Eff. 7/22/2012; Ord. 182-12 , File No. 120665, App. 8/8/2012, Eff. 9/7/2012; Ord. 56-13 , File No. 130062, App. 3/28/2013, Eff. 4/27/2013; Ord. 248-13 , File No. 130372, App. 11/8/2013, Eff. 12/8/2013; Ord. 235-14 , File No. 140844, App. 11/26/2014, Eff. 12/26/2014; Ord. 235-14 , File No. 140844, App. 11/26/2014, Eff. 12/26/2014; Ord. 22-15, File No. 141253, App. 2/20/2015, Eff. 3/22/2015; Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015; Ord. 166-16 , File No. 160477, App. 8/11/2016, Eff. 9/10/2016; Ord. 99-17, File No. 170206, App. 5/19/2017, Eff. 6/18/2017; Ord. 116-17, File No. 150969, App. 6/13/2017, Eff. 7/13/2017; Ord. 129-17, File No. 170203, App. 6/30/2017, Eff. 7/30/2017; Ord. 205-17, File No. 170418, App. 11/3/2017, Eff. 12/3/2017; Ord. 229-17, File No. 171041, App. 12/6/2017, Eff. 1/5/2018; Ord. 198-18, File

No. 180456, App. 8/10/2018, Eff. 9/10/2018; Ord. 277-18, File No. 180914, App. 11/20/2018, Eff. 12/21/2018; Ord. 179-18, File No. 180423, App. 7/27/2018, Eff. 8/27/2018, Oper. 1/1/2019; Ord. 182-19, File No. 190248, App. 8/9/2019, Eff. 9/9/2019; Ord. 63-20, File No. 200077, App. 4/24/2020, Eff. 5/25/2020; Ord. 149-21, File No. 210535, App. 9/29/2021, Eff. 10/30/2021; Ord. 197-21, File No. 210600, App. 11/5/2021, Eff. 12/6/2021; Ord. 233-21, File No. 210381, App. 12/22/2021, Eff. 1/22/2022; Ord. 37-22, File No. 211263, App. 3/14/2022, Eff. 4/14/2022; Ord. 75-22, File No. 220264, App. 5/13/2022, Eff. 6/13/2022; Ord. 70-23, File No. 220340, App. 5/3/2023, Eff. 6/3/2023; Ord. 47-24, File No. 231223, App. 3/15/2024, Eff. 4/15/2024; Ord. 54-24, File No. 240169, App. 3/22/2024, Eff. 4/22/2024, Retro. 3/30/2024; Ord. 113-24, File No. 240193, App. 6/13/2024, Eff. 7/14/2024, Retro. 3/30/2024; Ord. 297-24, File No. 241055, App. 12/19/2024, Eff. 1/19/2025; Ord. 37-25, File No. 240787, App. 4/3/2025, Eff. 5/4/2025)

AMENDMENT HISTORY

[Former] division (i) and division (l)(5)(A) amended; Ord. 140-11, Eff. 8/4/2011. [Former] division (i) amended; [former] division (p) added; Ord. 75-12 , Eff. 5/23/2012. [Former] division (i) amended; Ord. 106-12 , Eff. 7/22/2012. [Former] division (g)(1)(D) added; [former] divisions (g)(2) and (g)(3) amended; Ord. 182-12 , Eff. 9/7/2012. Divisions (c)(3), (c)(4), (c)(5)(A), (c)(5)(A)(i), and [former] (i) amended; former divisions (j)(A)-(D) redesignated as [former] (j)(1)-(4); [former] divisions (k)(1), (l)(3), (l)(5), (n)(1), and (o)(1) amended; Ord. 56-13 , Eff. 4/27/2013. [Former] division (i) amended; Ord. 248-13 , Eff. 12/8/2013. Former division (i) deleted; former division (j) redesignated as current division (i) and new division (i)(5) added; former divisions (k)-(o) redesignated as current divisions (j)-(n) and internal references adjusted accordingly; former divisions (p) and (p)(1)(A) redesignated as current divisions (o) and [former] (o)(1); Ord. 235-14 , Eff. 12/26/2014. Former division (c)(1)(A) merged into division (c)(1) and amended; former divisions (c)(1)(A)(i)-(iii) redesignated as (c)(1)(A)-(C); divisions (c)(4) and (c)(5) amended; former division (c)(6) deleted; divisions (f)(1)-(3) amended; former division (g)(1) merged into division (g) and former divisions (g)(1)(A)-(D) redesignated as (g)(1)-(4); former divisions (g)(2) and (g)(3) deleted; divisions (h)(1), (h)(3)(A)-(C), (j), and (j)(1) amended; former division (j)(1)(A)(i) merged into division (j)(1)(A) and amended; divisions (j)(1)(B), (l), and (l)(1) amended; former division (l)(1)(A)(i) merged into division (l)(1)(A) and amended; divisions (m)(1), (n)(1), and (n)(1)(A) amended; former division (o)(1) merged into division (o) and amended; divisions (p) and (q) added; Ord. 22-15, Eff. 3/22/2015. Divisions (n)(1)(A), (p), (p)(1), and (p)(2) amended; division (r) added; Ord. 188-15 , Eff. 12/4/2015. Division (s) added; Ord. 166-16 , Eff. 9/10/2016. Divisions (t) and (u) added; Ord. 99-17 , Eff. 6/18/2017. [Former] division (t) added; Ord. 116-17 , Eff. 7/13/2017. Divisions (a), (b), (c), (d), (e), (f)-(f)(5)(B), amended; former division (j)(1) merged into division (j) and amended; former divisions (j)(1)(A)-(C) redesignated as (j)(1)-(3); divisions (k)(1), (k)(2), (k)(4)(B), (k)(4)(B)(iv), and (k)(6) amended; former division (l)(1) merged into division (l), former divisions (l)(1)(A)-(B) redesignated as (l)(1)-(2), and current divisions (l)-(l)(2) amended; former division (n)(1) merged into division (n), former divisions (n)(1)(A)-(D) redesignated as (n)(1)-(4), and former divisions (n)(1)(B)(i)-(iii) redesignated as (n)(2)(A)-(C); current divisions (n), (n)(1), (n)(2)(A), and (n)(2)(C) amended; divisions (p), (p)(1), (p)(2), (p)(3), and (r) amended; Ord. 129-17 , Eff. 7/30/2017. Divisions (a), (f), and (o) amended; Ord. 205-17 , Eff. 12/3/2017. Second division (t) redesignated as (v) and related references amended; divisions (w) and (x) added; Ord. 229-17, Eff. 1/5/2018. Divisions (v) and (v)(1) amended; former divisions (v)(1)(A)- (v)(2)(G) deleted; former divisions (v)(3)-(v)(3)(F) and (v)(4) redesignated as (v)(2)-(v)(2)(F) and (v)(3); current division (v)(3) amended; Ord. 198-18, Eff. 9/10/2018. Divisions (y)-(y)(3) added; Ord. 277-18, Eff. 12/21/2018. Division (f)(2) amended; Ord. 179-18, Oper. 1/1/2019. Divisions (z)-(z)(B)[1] added; Ord. 182-19 , Eff. 9/9/2019. Exceptions (1)-(3) appended to division (n); divisions (z)(A) and (z)(B) redesignated as (z)(1) and (z)(2); Ord. 63-20, Eff. 5/25/2020. Division (aa) added; Ord. 149-21, Eff. 10/30/2021. Division (bb) added; Eff. 12/6/2021. Division (n)(1) deleted; divisions (n)(2)-(4) redesignated as (n)(1)-(3); division (n) Exceptions (1)(A) and (3) deleted; division (n) Exception (1)(B) merged into Exception (1); current division (n) Exceptions (1) and (2) amended; Ord. 233-21, Eff. 1/22/2022. Division (n) amendments reapplied; Exception (1) further amended; Ord. 37-22, Eff. 4/14/2022. Divisions (p), (p)(1), (p)(1)(D), (p)(2) amended; new division (p)(3) added; former division (p)(3) redesignated as (p)(4); Ord. 75-22, Eff. 6/13/2022. Divisions (p)(1)(A)-(D) deleted; divisions (p)-(p)(1) amended as (p); division (p)(2) amended as (p)(2)-(p)(2)(A); divisions (p)(1), (p)(2)(B), and (p)(5) added; Ord. 70-23, Eff. 6/3/2023. Divisions (cc)- (cc)(2)(B) added; Ord. 47-24, Eff. 4/15/2024; and Ord. 54-24, Retro. 3/30/2024. Division (cc)(1)(D) redesignated as (cc)(1)(E); new division (cc)(1)(D) added; division (cc)(1)(E)(i) amended; Ord. 113-24, Eff. 7/14/2024, Retro. 3/30/2024. Divisions (i) and (i)(5) amended; Ord. 297-24, Eff. 1/19/2025. Divisions (a), (g), (g)(2)-(3) amended; division (g)(4) deleted; Ord. 37-25, Eff. 5/4/2025.

*** Editor's Note:**

Prior to the effectiveness of Ord. *235-14* , this Sec. 303(i) pertained to formula retail uses. That ordinance deleted those provisions from this section and enacted new Sec. 303.1 ("Formula Retail Uses").

EXHIBIT 2

SEC. 101. PURPOSES.

This Planning Code is adopted to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare, and for the following more particularly specified purposes:

(a) To guide, control and regulate future growth and development in accordance with the General Plan of the City and County of San Francisco;

(b) To protect the character and stability of residential, commercial and industrial areas within the City, and to promote the orderly and beneficial development of such areas;

(c) To provide adequate light, air, privacy and convenience of access to property, and to secure safety from fire and other dangers;

(d) To prevent overcrowding the land and undue congestion of population;

(e) To regulate the location of buildings and the use of buildings and land adjacent to streets and thoroughfares, in such manner as to obviate the danger to public safety caused by undue interference with existing or prospective traffic movements on such streets and thoroughfares.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015)

AMENDMENT HISTORY

- Introductory paragraph and division (a) amended; Ord. 188-15 , Eff. 12/4/2015.

SEC. 101.1. GENERAL PLAN CONSISTENCY AND IMPLEMENTATION.

(See Interpretations related to this Section.)

(a) The General Plan shall be an integrated, internally consistent and compatible statement of policies for San Francisco. To fulfill this requirement, after extensive public participation and hearings, the Planning Commission shall in one action amend the General Plan by January 1, 1988.

(b) The following Priority Policies are hereby established. They shall be included in the preamble to the General Plan and shall be the basis upon which inconsistencies in the General Plan are resolved:

(1) That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses enhanced;

(2) That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods;

(3) That the City's supply of affordable housing be preserved and enhanced;

(4) That commuter traffic not impede Muni transit service or overburden our streets or neighborhood parking;

(5) That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced;

(6) That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake;

(7) That landmarks and historic buildings be preserved; and,

(8) That our parks and open space and their access to sunlight and vistas be protected from development.

(c) The City may not adopt any zoning ordinance or development agreement authorized pursuant to Government Code Section 65865 after November 4, 1986, unless prior to that adoption it has specifically found that the ordinance or development agreement is consistent with the Priority Policies established above.

(d) The City may not adopt any zoning ordinance or development agreement authorized pursuant to Government Code Section 65865 after January 1, 1988, unless prior to that adoption it has specifically found that the ordinance or development agreement is consistent with the General Plan.

(e) Prior to issuing a permit for any project or adopting any legislation which requires an initial study under the California Environmental Quality Act, and prior to issuing a permit for any demolition, conversion or change of use, and prior to taking any action which requires a finding of consistency with the General Plan, the City shall find that the proposed project or legislation is consistent with the Priority Policies established above. For any such permit issued or legislation adopted after January 1, 1988 the City shall also find that the project is consistent with the General Plan.

(Added by Proposition M, 11/4/86; amended by Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015)

AMENDMENT HISTORY

- Divisions (a), (b), (d), and (e) amended; Ord. 188-15 , Eff. 12/4/2015.

SEC. 102. DEFINITIONS.

(See Interpretations related to this Section.)

For the purposes of this Code, certain words and terms used herein are defined as set forth in this and the following sections. Additional definitions applicable to Signs are set forth in Section 602. Additional definitions applicable to development impact fees and requirements that authorize the payment of in-lieu fees are set forth in Section 401. Additional definitions applicable only to Downtown Residential Districts are set forth in Section 890. Additional definitions applicable only to the North Beach Neighborhood Commercial District and the North Beach Special Use District are set forth in Section 780.3. Additional definitions applicable only to the Bernal Heights Special Use District are set forth in Section 242. Additional definitions applicable only to Article 9, Mission Bay Districts, are set forth in Section 996. All words used in the present tense shall include the future. All words in the plural number shall include the singular number, and all words in the singular number shall include the plural number, unless the natural construction of the wording indicates otherwise. The word "shall" is mandatory and not directory. Whenever any of the following terms is used it shall mean the corresponding officer, department, board or commission or its successor of the City and County of San Francisco, State of California, herein referred to as the City: Assessor, Board of Supervisors, Planning Department, Department of Public Works, Director of Planning, Planning Commission, or Zoning Administrator. In each case, the term shall be deemed to include an employee of any such officer or department of the City who is lawfully authorized to perform any duty or exercise any power as a representative or agent of that officer or department.

(Amended by Ord. 217-16; Ord. 129-17; Ord. 70-23; see Sec. 102 history note.)

A

Accessory Use. A related minor Use that is either necessary to the operation or enjoyment of a lawful Principal Use or Conditional Use, or appropriate, incidental, and subordinate to any such use, and is located on the same lot. Accessory Uses are regulated by Sections 204 through 204.5 and Sections 703(d), 803.2(d), 803.3(b)(1)(C), 825(c)(1)(C), and 986 of this Code.

(Added by Ord. 129-17; amended by Ord. 202-18; 208-19; Ord. 63-20; see Sec. 102 history note.)

Adjacent Building. Generally, a building on a lot adjoining the subject lot along a side lot line.

Adult Business. A Retail Sales and Service Use that includes the following: adult bookstore or adult video store, as defined by Section 791 of the Police Code; adult theater, as defined by Section 791 of the Police Code; and encounter studio, as defined by Section 1072.1 of the Police Code. Such use shall be located no less than 1,000 feet from another Adult Business use.

Adult Sex Venue [2] A Retail Sales and Service Use that operates pursuant to Health Code Article 47 [2] An Adult Sex Venue may include bathhouse facilities such as pools, tubs, or steam rooms, and is eligible for a Limited Live Performance permit.

(Added by Ord. 75-22; see Sec. 102 history note.)

Agricultural and Beverage Processing 1. An Industrial use that involves the processing of agricultural products and beverages with a low potential for noxious fumes, noise, and nuisance to the surrounding area, including but not limited to bottling plants, breweries, dairy products plant, malt manufacturing or processing plant, fish curing, smoking, or drying, cereal manufacturing, liquor distillery, manufacturing of felt or shoddy, processing of hair or products derived from hair, pickles, sauerkraut, vinegar, yeast, soda or soda compounds, meat products, and fish oil. This use does not include the processing of wood pulp, and is subject to the operating conditions outlined in Section 202.2(d).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agricultural and Beverage Processing 2. An Industrial Use that involves the processing of agricultural products and beverages with a high potential for noxious fumes, noise, and nuisance to the surrounding area, including but not limited to a flour mill; sugar refinery; manufacturer of cannabis products or extracts that are derived by using volatile organic compounds (any use requiring License Type 7—Manufacturer 2, as defined in California Business and Professions Code, Division 10); and facility for wool pulling or scouring. This use does not include the processing of wood pulp, and is subject to the operating conditions outlined in Section 202.2(d).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture. A Use Category that includes Industrial Agriculture, Neighborhood Agriculture, and Large-Scale Urban Agriculture.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Industrial. An Agricultural use that involves the cultivation of plants for wholesale sales or industrial uses. This use includes, but is not limited to, plant nurseries and cannabis cultivation operations, and is subject to the location and operating conditions listed in Section 202.2(c). For the cultivation of cannabis, this definition includes all cultivation pursuant to state license types that allow for indoor and/or mixed-light cultivation with up to 22,000 sq. ft. of canopy.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Large-Scale Urban. An Agricultural Use that is characterized by the use of land for the production of food or horticultural crops to be harvested, sold, donated, or otherwise not used or consumed by the operator of the premises that occur: (a) on a plot of land one acre or larger or (b) on smaller parcels that cannot meet the physical and operational standards for Neighborhood Agriculture. This use is subject to location and operational conditions outlined in Section 202.2(c) and does not include any cannabis-related use or any other agricultural activities, including the cultivation of cannabis for personal use.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Neighborhood. An Agricultural Use that occupies less than one acre for the production of food or horticultural crops to be harvested, sold, or donated and complies with the con trols and standards herein. The use includes, but is not limited to, home, kitchen,

and roof gardens. Farms that qualify as Neighborhood Agricultural Use may include, but are not limited to, community gardens, community-supported agriculture, market gardens, and private farms. Neighborhood Agricultural Use may be principal or accessory use. This use is subject to location and operational conditions outlined in Section 202.2(c) and does not include any cannabis-related use or any other agricultural activities, including the cultivation of cannabis for personal use.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Urban. Any subgrouping of Agricultural Uses that includes either Neighborhood Agriculture or Large-Scale Urban Agriculture.

Alley. A right-of-way, less than 30 feet in width, permanently dedicated to common and general use by the public.

Ambulance Service. See Service, Ambulance.

Animal Hospital. A Retail Sales and Service Use that provides medical care and accessory boarding services for animals, not including a Kennel.

Arts Activities. A retail Entertainment, Arts and Recreation Use that includes performance, exhibition (except exhibition of films), rehearsal, production, post-production and some schools of any of the following: dance; music; dramatic art; film; video; graphic art; painting; drawing; sculpture; small-scale glassworks; ceramics; textiles; woodworking; photography; custom-made jewelry or apparel; and other visual, performance, and sound arts and craft. It shall exclude accredited Schools and Post-Secondary Educational Institutions. It shall include commercial arts and art-related business service uses including, but not limited to: recording and editing services; small-scale film and video developing and printing; titling; video and film libraries; special effects production; fashion and photo stylists; production, sale, and rental of theatrical wardrobes; and studio property production and rental companies. Arts spaces shall include studios, workshops, archives, and theaters, and other similar spaces customarily used principally for arts activities, exclusive of a Movie Theater, General Entertainment, arcades that provide eleven or more amusement game devices, Adult Business, and any other establishment where liquor is customarily served during performances.

(Amended by Ord. 129-17; Ord. 202-18; Ord. 285-18; Ord. 205-19; see Sec. 102 history note.)

Automobile Assembly. An Industrial Use that involves the assembly of parts for the purpose of manufacturing automobiles, trucks, buses, or motorcycles. This use is subject to operational and location restrictions outlined in Section 202.2(d) of this Code.

Automobile Wrecking. An Industrial Use that includes the storage of vehicles in not in operational condition and/or sale of used automobile parts, or for the storage, dismantling, or abandonment of junk, automobiles, trailers, machinery or parts thereof. This use is subject to operational and location restrictions outlined in Section 202.2(d) of this Code.

Automobile Sale or Rental. A Retail Automotive Use that provides vehicle sales or rentals within a building or on an open lot.

Automotive Repair. A Retail Automotive Use that provides any of the following automotive repair services, when conducted within an enclosed building having no openings, other than fixed windows or exits required by law, located within 50 feet of any R District: minor auto repair, engine repair, rebuilding, or installation of power train components, reconditioning of badly worn or damaged motor vehicles, collision service, or full body paint spraying. It may include other services for automobiles including, but not limited to, accessory towing, if all towed vehicles stored on the premises are limited to those vehicles that are to be repaired on the premises.

Automotive Service. A subgrouping of Retail Automotive Uses providing services for motor vehicles that includes Gas Station, Automotive Service Station, Automotive Repair, and Automotive Wash.

(Amended by Ord. 188-15; see Sec. 102 history note.)

Automotive Service Station. A Retail Automotive Use that provides motor fuels and lubricating oils directly into motor vehicles and minor auto repairs (excluding engine repair, rebuilding, or installation of power train components, reconditioning of badly worn or damaged motor vehicles, collision service, or full body paint spraying) and services that remain incidental to the principal sale of motor fuel. Repairs shall be conducted within no more than three enclosed service bays in buildings having no openings, other than fixed windows or exits required by law, located within 40 feet of any R District. It may include other incidental services for automobiles including, but not limited to, accessory towing, if the number of towing vehicles does not exceed one, and all towed vehicles stored on the premises are limited to those vehicles that are to be repaired on the premises. This use is subject to the controls in Sections 187.1 and 202.2(b).

(Amended by Ord. 188-15; Ord. 129-17; Ord. 264-22; see Sec. 102 history note.)

Automotive Use. A Commercial Use category that includes Automotive Repair, Ambulance Services, Automobile Sale or Rental, Automotive Service Station, Automotive Wash, Electric Vehicle Charging Location, Fleet Charging, Gas Station, Parcel Delivery Service, Private Parking Garage, Private Parking Lot, Public Parking Garage, Public Parking Lot, Vehicle Storage Garage, Vehicle Storage Lot, and Motor Vehicle Tow Service. All Automotive Uses that have Vehicular Use Areas defined in this Section of the Code shall meet the screening requirements for vehicular use areas in Section 142.

(Amended by Ord. 202-18; Ord. 190-22; see Sec. 102 history note.)

Automotive Use, Non-Retail. A subcategory of Automotive Use that includes Ambulance Services, Fleet Charging, Parcel Delivery Service, Private Parking Garage, Private Parking Lot, and Motor Vehicle Tow Service.

(Amended by Ord. 202-18; Ord. 190-22; see Sec. 102 history note.)

Automotive Use, Retail. A subcategory of Automotive Use that includes Automotive Repair, Automotive Sale or Rental, Automobile Service Station, Automotive Wash, Electric Vehicle Charging Location, Gas Station, Public Parking Garage, Public Parking Lot, Vehicle Storage Garage, and Vehicle Storage Lot.

(Amended by Ord. 190-22; see Sec. 102 history note.)

Automotive Wash. A Retail Automotive Use that provides cleaning and polishing of motor vehicles, including self-service operations. This use is subject to the location and operational restrictions in Section 202.2(e).

Awning. A light roof-like structure, supported entirely by the exterior wall of a building; consisting of a fixed or movable frame covered with cloth, plastic, or metal; extending over doors, windows, and/or show windows; with the purpose of providing protection from sun and rain and/or embellishment of the façade; as further regulated in Section 3105 of the Building Code.

B

Bar. A Retail Sales and Service Use that provides on-site alcoholic beverage sales for drinking on the premises, including bars serving beer, wine, and/or liquor to the customer where no person under 21 years of age is admitted (with Alcoholic Beverage Control [ABC] license types 23, 42, 48, or 61), drinking establishments serving beer where minors are present (with ABC license types 40 or 60) in conjunction with other uses such as Movie Theaters and General Entertainment, and bars serving wine operated by licensed winegrowers (with ABC license type 02). Such businesses shall operate with the specified conditions in Section 202.2(a). A non-profit theater that provides on-site alcoholic beverage sales only for consumption by ticket-holding patrons on the premises, with ABC license type 64, shall not be considered a Bar use. A music entertainment facility that is authorized to sell beer, wine, and distilled spirits at retail for consumption on the premises, with ABC license type 90, shall not be considered a Bar use.

(Amended by Ord. 188-15; Ord. 205-19; Ord. 249-23; see Sec. 102 history note.)

Basement. See Story.

Bedroom. A room primarily used for sleeping that meets the minimum requirements as defined in the Building Code for sleeping rooms.

Board of Supervisors (Board). The Board of Supervisors of the City and County of San Francisco.

Bona Fide Eating Place. A place that is regularly and in a bona fide manner used and kept open for the service of meals to guests for compensation and that has suitable kitchen facilities connected therewith, containing conveniences for cooking of an assortment of foods that may be required for ordinary meals.

(a) "Meals" shall mean an assortment of foods commonly ordered at various hours of the day for breakfast, lunch, or dinner. Incidental food service, comprised only of appetizers to accompany drinks, is not considered a meal. Incidental, sporadic, or infrequent sales of meals or a mere offering of meals without actual sales is not compliance.

(b) "Guests" shall mean persons who, during the hours when meals are regularly served therein, come to a bona fide public eating place for the purpose of obtaining, and actually order and obtain at such time, in good faith, a meal therein. Nothing in this section, however, shall be construed to require that any food be sold or purchased with any beverage.

(c) Actual and substantial sales of meals are required, during the normal days and meal hours that a bona fide public eating place is open, provided that "normal days of operation" shall mean a minimum of five days a week and "normal hours" of operation for meal service shall mean approximately 7:00 a.m. to 11:00 a.m. if open for breakfast; 11:00 a.m. to 2:00 p.m. if open for lunch; or 5:00 p.m. to 10:00 p.m. if open for dinner.

(d) The premises must be equipped and maintained in good faith. This means the premises must possess working refrigeration and cooking devices, pots, pans, utensils, table service, condiment dispensers, menus, signs, and enough goods to make substantial meals. The premises must comply with all regulations of the Department of Public Health.

(e) The establishment must secure significant revenue from food and non-alcoholic beverage sales. Significant revenue from food and non-alcoholic beverage sales shall mean either:

(1) A minimum of 51% of the establishment’s gross receipts shall be from food sales prepared and sold to guests on the premises. Records of the establishment’s gross receipts shall be provided to the Department upon request; or

(2) Annual gross food and non-alcoholic beverage sales prepared and sold to guests on the premises of at least $4,200 per occupant based on the premises’ maximum occupant load as determined and approved by the Fire Department and Department of Building Inspection. Records of the establishment’s gross sales shall be provided to the Department upon request. The Zoning Administrator may adjust the amount of $4,200 per occupant each year, provided that such adjustments are supported by specific financial and economic criteria, including but not limited to a review of the restaurant market, costs, prices, profits, and loses,[1] and recognizing the differences in sizes and types of establishments.

(f) A "bona fide eating place" does not include an Adult Business as defined in this Section of the Code.

(g) For a place that has also established a Nighttime Entertainment Use and that only provides on-site alcoholic beverage sales for consumption by ticket-holding patrons on the premises during the normal hours of operation of entertainment activities, paragraphs (c) and (e) do not apply, but actual and substantial sales of meals are required during the normal hours of operation. For purposes of this paragraph, the “normal hours of operation” shall include two hours prior to, and one hour after, entertainment activities, but may not exceed eight total hours in a calendar day. This paragraph (g) does not apply to a place located in the Broadway Neighborhood Commercial District, North Beach Neighborhood Commercial District, Pacific Avenue Neighborhood Commercial District, or Polk Street Neighborhood Commercial District.

(Amended by Ord. 205-19; Proposition H, 11/3/2020; see Sec. 102 history note.)

Building. Any structure having a roof supported by columns or walls.

C

Cannabis Retail. A Retail Sales and Service Use that sells or otherwise provides cannabis and cannabis-related products for adult use, and that may also include the sale or provision of cannabis for medicinal use. A Cannabis Retail establishment may only be operated by the holder of (a) a valid license from the State of California (License Type 10—Retailer, as defined in California Business and Professions Code, Division 10) and (b) a valid permit from the City's Office of Cannabis. This use is subject to operating and location restrictions set forth in Section 202.2(a).

(Added by Ord. 229-17; see Sec. 102 history note.)

Canopy. A light roof-like structure, supported by the exterior wall of a building and on columns or wholly on columns, consisting of a fixed or movable frame covered with approved cloth, plastic or metal, extending over entrance doorways only, with the purpose of providing protection from sun and rain and/or embellishment of the façade, as further regulated in Section 3105 of the Building Code.

Catering. A Non-Retail Sales and Service Use that involves the preparation and delivery of goods including the following items: food, beverages; balloons, flowers, plants, party decorations and favors; or cigarettes/candy.

Chair/Foot Massage. See Massage, Chair/Foot.

Child Care Facility. An Institutional Community Use defined in California Health and Safety Code Section 1596.750 that provides less than 24-hour care for children by licensed personnel and meets the open-space and other requirements of the State of California and other authorities.

City. The City and County of San Francisco.

Commercial to Residential Adaptive Reuse. Commercial to Residential Adaptive Reuse shall mean to change the use of an existing Gross Floor Area from a non-residential use, other than a hotel use, to a residential use pursuant to Section 210.5.

(Added by Ord. 122-23; Ord. 159-23; see Sec. 102 history note.)

Commercial Use. A land use with the sole or chief emphasis on making financial gain, including but not limited to Agricultural Uses, Industrial Uses, Sales and Service Uses, Retail Entertainment Uses, and Auto Uses.

Commission. The San Francisco Planning Commission.

Community Facility. An Institutional Community Use that includes community clubhouses, neighborhood centers, community cultural centers, or other community facilities not publicly owned but open for public use in which the chief activity is not carried on as a gainful business and whose chief function is the gathering of persons from the immediate neighborhood in a structure for the purposes of recreation, culture, social interaction, health care, or education other than Institutional Uses as defined in this Section.

Community Facility, Private. An Institutional Community Use that includes a private lodge, private clubhouse, and private recreational facility other than a Community Facility as defined in this section, and which is not operated as a gainful business.

Community Recycling Collection Center. A Utility and Infrastructure Use that collects, stores, or handles recyclable materials, including glass and glass bottles, newspaper, aluminum, paper and paper products, plastic and other materials which may be processed and recovered, if within a completely enclosed container or building, having no openings other than fixed windows or exits required by law, provided that: (1) Flammable materials are collected and stored in metal containers; and (2) Collection hours are limited to 9:00 a.m. to 7:00 p.m. daily. It does not include the storage, exchange, packing, disassembling or handling of junk, waste, used furniture and household equipment, used cars in operable condition, used or salvaged machinery, or salvaged house-wrecking and structural steel materials and equipment.

Condition(s) of Approval. A condition or set of written conditions imposed by the Planning Commission or another permit-approving or issuing City agency or appellate body to which a project applicant agrees to adhere and fulfill when it receives approval for the construction of a development project subject to this Article.

Conditional (or Conditionally Permitted) Use. Conditional Use allows the Planning Commission to consider uses or projects that may be necessary or desirable in a particular neighborhood, but which are not allowed as a matter of right within a particular zoning district. Whether a use is conditional in a given district is indicated in this Code. Sections of this Code that govern Conditional Uses include, but are not limited to Sections 178, 179, 303, and 303.1.

(Added by Ord. 129-17; amended by Ord. 208-19; see Sec. 102 history note.)

Corner Lot. See Lot, Corner.

Cottage Food Operation. An Accessory Use to a Dwelling Unit as defined in Section 113758 of the California State Health and Safety Code.

Court. Any space on a lot other than a yard that, from a point not more than two feet above the floor line of the lowest story in the building on the lot in which there are windows from rooms abutting and served by the court, is open and unobstructed to the sky, except for obstructions permitted by this Code. An "outer court" is a court, one entire side or end of which is bounded by a front setback, a rear yard, a side yard, a front lot line, a street, or an alley. An "inner court" is any court that is not an outer court.

D

DBI. The San Francisco Department of Building Inspection or its successor.

Department. See Planning Department.

"Development Application" shall mean any application for a building permit, site permit, Conditional Use, Variance, Large Project Authorization, HOME-SF Project Authorization, authorization pursuant to Planning Code Sections 305.1, 309, 309.1, or 322, or for any

other authorization of a development project required to be approved by the Zoning Administrator or Planning Commission.

(Added by Ord. 15-19; see Sec. 102 history note.)

Development Impact Fee. A fee imposed on a development project as a condition of approval to mitigate the impacts of increased demand for public services, facilities, or housing caused by the development project that may or may not be an impact fee governed by the California Mitigation Fee Act (California Government Code Section 66000, *et seq.*).

Design Professional. A Non-Retail Sales and Service Use that provides professional design services to the general public or to other businesses and includes architectural, landscape architectural, engineering, interior design, and industrial design services. It does not include (1) the design services of graphic artists or other visual artists which are included in the definition of Arts Activities; or (2) the services of advertising agencies or other services which are included in the definition of Retail Professional Service or Non-Retail Professional Service, Financial Service, or Health Service. Design Professional Uses in Neighborhood Commercial Districts are subject to the operating restrictions outlined in Section 202.2(i).

(Amended by Ord. 202-18; Ord. 233-21; Ord. 37-22; Ord. 249-23; see Sec. 102 history note.)

Designated Child Care Unit. A Dwelling Unit that is designated for use as a State-licensed Small Family Child Care Home and meets the applicable standards established in Section 414A.6.

(Added by Ord. 7-19; see Sec. 102 history note.)

Diagonal Dimension. See Plan Dimensions.

(Added by Ord. 206-19; see Sec. 102 history note.)

Director. The Director of the Planning Department or his or her designee.

District. A portion of the territory of the City, as shown on the Zoning Map, within which certain regulations and requirements or various combinations thereof apply under the provisions of this Code. The term "district" shall include any use, special use, height and bulk, or special sign district. The classes of use districts are described in Section 201 of this Code.

Drive-Up Facility. A Use Characteristic that includes a structure designed for drive-to or drive-through trade which provides service to patrons while in private motor vehicles, excluding Automotive Gas Station, Automotive Service Station, Automotive Repair, and Automotive Wash.

DPW. The Department of Public Works or its successor.

Dwelling. A building, or portion thereof, containing one or more Dwelling Units. A "one-family dwelling" is a building containing exclusively a single Dwelling Unit. A "two-family dwelling" is a building containing exclusively two Dwelling Units. A "three-family dwelling" is a building containing exclusively three Dwelling Units.

Dwelling Unit. A Residential Use defined as a room or suite of two or more rooms that is designed for, or is occupied by, one family doing its own cooking therein and having only one kitchen. A Dwelling Unit shall also include “employee housing” when providing accommodations for six or fewer employees, as provided in State Health and Safety Code §17021.5. A housekeeping room as defined in the Housing Code shall be a Dwelling Unit for purposes of this Code. For the purposes of this Code, a Live/Work Unit, as defined in this Section, shall not be considered a Dwelling Unit.

(Amended by Ord. 248-23; see Sec. 102 history note.)

Dwelling Unit, Accessory, or ADU. Also known as a Secondary Unit or In-Law Unit, is a Dwelling Unit that meets all the requirements of Section 207.1 or Section 207.2 and that is accessory to at least one other Dwelling Unit on the same lot. A detached ADU shall not share structural walls with the primary structure on the lot. Height for detached ADUs located outside the buildable area shall be measured from existing grade at any given point to either a) the highest point of a finished roof in the case of a flat roof or b) the average height of a pitched roof or stepped roof, or similarly sculptured roof form. Height for detached ADUs located outside the buildable area shall not be eligible for any exemptions described in Planning Code subsection 260(b).

(Added by Ords. 161-15 and 162-15; amended by Ord. 162-16; Ord. 95-17; Ord. 195-18; Ord. 116-19; Ord. 53-23; Ord. 62-24; see Sec. 102 history note.)

Dwelling Unit, Junior Accessory, or JADU. A Dwelling Unit that meets all the requirements of Section 207.2, and that:

(a) is accessory to at least one other Dwelling Unit on the same lot;

(b) is no more than 500 square feet of Gross Floor Area;

(c) is contained entirely within an existing or proposed single-family structure;

(d) may include separate sanitation facilities, or may share sanitation facilities with the existing structure;

(e) is owner-occupied, unless the owner resides in the remaining portion of the structure; provided, however, that owner-occupancy shall not be required if the owner is a governmental agency, land trust, or housing organization;

(f) includes an entrance to the Junior Accessory Dwelling Unit that is separate from the main entrance to the proposed or existing single-family structure; and

(g) includes an efficiency kitchen that meets the requirements of California Government Code Section 66333(f), including a cooking facility with appliances, and a food preparation counter and storage cabinets that are of reasonable size in relation to the size of the Junior Accessory Dwelling Unit.

(Added by Ord. 53-23; amended by Ord. 62-24; Ord. 297-24; see Sec. 102 history note.)

E

Eating and Drinking Use. A grouping of Retail Sales and Service Uses that provide food and/or beverages for either on- or off-site food consumption including Bars, Restaurants, and Limited-Restaurants. Eating and Drinking Uses are subject to the conditions in Section 202.2(a).

(Amended by Ord. 129-17; see Sec. 102 history note.)

Electric Vehicle Charging Location. Automotive Use, Retail that provides electricity to electric motor vehicles through more than one Electric Vehicle Charging Stations on a retail basis to the general public as a primary use. Electric Vehicle Charging Locations may include ancillary services, including but not limited to restrooms, self-service vending, and limited retail amenities primarily for the benefit of customers charging their vehicles.

(Added by Ord. 190-22; see Sec. 102 history note.)

Electric Vehicle Charging Station. An electric vehicle charging space served by an electric vehicle charger or other charging equipment.

(Added by Ord. 190-22; see Sec. 102 history note.)

Entertainment. See also Entertainment, Arts and Recreation Use, General Entertainment, Limited Live Performance, Nighttime Entertainment, and Outdoor Entertainment.

Entertainment, General. A Retail Entertainment, Arts and Recreation Use that provides entertainment or leisure pursuits to the general public including dramatic and musical performances where alcohol is not served during performances, arcades that provide eleven or more amusement game devices (such as video games, pinball machines, or other such similar mechanical and electronic amusement devices), billiard halls, bowling alleys, skating rinks, and mini-golf, when conducted within a completely enclosed building, and which is adequately soundproofed or insulated so as to confine incidental noise to the premises. Mechanical amusement devices are further regulated in Sections 1036 through 1036.24 of the Police Code. The use may include a non-profit theater with ABC license Type 64 and a music entertainment facility with ABC license Type 90, provided that alcohol is not served during performances.

(Amended by Ord. 129-17; Ord. 205-19; Ord. 249-23; see Sec. 102 history note.)

Entertainment, Nighttime. A Retail Entertainment, Arts and Recreation Use that includes dance halls, discotheques, nightclubs, private clubs, and other similar evening-oriented entertainment activities which require dance hall keeper police permits or Place of Entertainment police permits, as defined in Section 1060 of the Police Code, which are not limited to non-amplified live entertainment, including Restaurants and Bars which present such activities. Nighttime Entertainment uses do not include any Arts Activity, any theater performance space which does not serve alcoholic beverages during performances, or any temporary uses permitted pursuant to Sections 205 through 205.5 of this Code. This use is also subject to the controls in Section 202.11. Nighttime Entertainment uses are subject to the Entertainment Commission's Good Neighbor Policy. The use may include a non-profit theater with ABC license Type 64 and a music entertainment facility with ABC license Type 90.

(Amended by Ord. 111-21; Ord. 70-23; Ord. 249-23; see Sec. 102 history note.)

Entertainment, Outdoor. A Retail Entertainment, Arts and Recreation Use that includes circuses, carnivals, or other amusement enterprises not conducted within a building, and conducted on premises not less than 200 feet from any R District.

Entertainment, Arts and Recreation Use. A Use Category that includes Arts Activities, General Entertainment, Livery Stables, Movie Theater, Nighttime Entertainment, Open Recreation Area, Outdoor Entertainment, Passive Outdoor Recreation and Sports Stadiums. Adult Business is not included in this definition, except for the purposes of Development Impact Fee Calculation as described in Article 4.

(Amended by Ord. 129-17; Ord. 205-19; see Sec. 102 history note.)

F

Façade. An entire exterior wall assembly including, but not limited to, all finishes and siding, fenestration, doors, recesses, openings, bays, parapets, sheathing, and framing.

Façade, Front. The portion of the Façade fronting a right-of-way, or the portion of the Façade most closely complying with that definition, as in the case of a flag lot. Where a lot has more than one frontage on rights-of-way. all such frontages shall be considered Front Façades except where a façade meets the definition of "Rear Façade."

Façades, Principal. Exterior walls of a Building that are adjacent to or front on a public street, park, or plaza.

Façade, Rear. That portion of the Façade facing the part of a lot that most closely complies with the applicable Planning Code rear yard requirements.

Fair Return on Investment. Where the property owner does not own the business, the before income tax total annual rent and other compensation received from the business for the lease of the land and buildings, less the expenses of the lessor, on a cash basis. Where the property owner also owns the business, the before income tax profit on the sale of all goods and services at the business on a cash basis; for an Automotive Service Station business, it shall include the sale of gasoline, less the cost of goods sold and operating costs.

Family. A single and separate living unit, consisting of either one person, or two or more persons related by blood, marriage or adoption or by legal guardianship pursuant to court order, plus necessary domestic servants and not more than three roomers or boarders; a group of not more than five persons unrelated by blood, marriage or adoption, or such legal guardianship unless the group has the attributes of a family in that it (a) has control over its membership and composition; (b) purchases its food and prepares and consumes its meals collectively; and (c) determines its own rules or organization and utilization of the residential space it occupies. A group occupying group housing or a hotel, motel, or any other building or portion thereof other than a Dwelling, shall not be deemed to be a family.

(Amended by Ord. 63-20; see Sec. 102 history note.)

Fleet Charging. Automotive Use, Non-Retail that provides electricity to electric motor vehicles through one or more Electric Vehicle Charging Stations that are dedicated or reserved for private parties pursuant to contract or other agreement and are not available to the general public. Fleet Charging is not allowed as an accessory use to any other principal use. Parcel Delivery Service activity, including unloading, sorting, and/or reloading merchandise for deliveries, is prohibited as part of a Fleet Charging use.

(Added by Ord. 190-22; amended by Ord. 2-24; see Sec. 102 history note.)

Flexible Retail. A Retail Sales and Service Use subject to the requirements of Section 202.9, that combines a minimum of two of the following distinct Uses within a space that may be operated by one or more business operators:

(1) Arts Activities;

(2) Restaurant, Limited;

(3) Retail Sales and Services, General;

(4) Service, Personal;

(5) Service, Retail Professional; and

(6) Trade Shop.

(Added by Ord. 285-18; amended by Ord. 111-21; Ord. 249-23; see Sec. 102 history note.)

Flexible Workspace. A Retail Sales and Service use that is a combination of any uses within the Retail Sales and Service use category or a General Entertainment use that operates in conjunction with a principally or conditionally permitted Non-Retail Sales and Service use other than a Commercial Storage, Wholesale Sales, or Wholesale Storage use. The Retail Sales and Service or General Entertainment portion of the use shall be at least one-third of the overall Gross Floor Area and must face the street.

(Added by Ord. 122-23; Ord. 159-23; see Sec. 102 history note.)

Floor Area, Gross. In Districts other than C-3, the Central SoMa Special Use District and the Van Ness Special Use District, the sum of the gross areas of the several floors of a building or buildings, measured from the exterior faces of exterior walls or from the centerlines of walls separating two buildings. Where columns are outside and separated from an exterior wall (curtain wall) that encloses the building space or are otherwise so arranged that the curtain wall is clearly separate from the structural members, the exterior face of the curtain wall shall be the line of measurement, and the area of the columns themselves at each floor shall also be counted.

In the C-3 and Central SoMa and Van Ness Special Use Districts, the sum of the gross areas of the several floors of a building or buildings, measured along the glass line at windows at a height of four feet above the finished floor and along a projected straight line parallel to the overall building wall plane connecting the ends of individual windows, provided, however, that such line shall not be inward of the interior face of the wall.

(a) Except as specifically excluded in this definition, "Gross Floor Area" shall include, but not be limited to, the following:

(1) Basement and cellar space, including tenants' storage areas and all other spaces except that used only for storage or services necessary to the operation or maintenance of the building itself;

(2) Elevator shafts, stairwells, exit enclosures, and smoke-proof enclosures at each floor;

(3) Floor space in penthouses except as specifically excluded in this definition;

(4) Attic space (whether or not a floor has been laid) capable of being made into habitable space;

(5) Floor space in balconies or mezzanines in the interior of the building;

(6) Floor space in open or roofed porches, arcades, or exterior balconies, if such porch, arcade, or balcony is located above the ground floor or first floor of occupancy above basement or garage and is used as the primary access to the interior space it serves;

(7) In districts other than the C-3 and Central SoMa Special Use District, floor space in accessory buildings; and

(8) In the C-3 and Central SoMa Special Use Districts, any floor area dedicated to accessory or non-accessory parking, except for bicycle parking, required off-street loading, and accessory parking as specified in subsection (b)(7); and

(9) Any other floor space not specifically excluded in this definition.

(b) "Gross Floor Area" shall not include the following:

(1) Basement and cellar space used only for storage or services necessary to the operation or maintenance of the building itself;

(2) Attic space not capable of being made into habitable space;

(3) Elevator or stair penthouses, accessory water tanks or cooling towers, and other mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself, if located at the top of the building or separated therefrom only by other space not included in the gross floor area;

(4) Mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself (A) if located at an intermediate story of the building and forming a complete floor level; or (B) in the C-3 and Central SoMa Special Use Districts, if located on a number of intermediate stories occupying less than a full floor level, provided that the mechanical equipment,

appurtenances, and areas are permanently separated from occupied floor areas and in aggregate area do not exceed the area of an average floor as determined by the Zoning Administrator;

(5) Outside stairs to the first floor of occupancy at the face of the building which the stairs serve, or fire escapes;

(6) Floor space dedicated to accessory parking that does not exceed the amount principally permitted as accessory, and is located on any Basement Story;

(7) In C-3 and CMUO Districts, floor space dedicated to parking which does not exceed the amount principally permitted as accessory, and is located underground;

(8) Bicycle parking that meets the standards of Sections 155.1 through 155.4 of this Code;

(9) Arcades, plazas, walkways, porches, breezeways, porticos and similar features (whether roofed or not), at or near street level, accessible to the general public and not substantially enclosed by exterior walls; and accessways to public transit lines, if open for use by the general public; all exclusive of areas devoted to sales, service, display, and other activities other than movement of persons;

(10) Balconies, porches, roof decks, terraces, courts and similar features, except those used for primary access as described in Paragraph (a)(6) above, provided that:

(A) If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the clear space is less than 15 feet in either dimension, the area shall not be excluded from Gross Floor Area unless it is fully open to the sky (except for roof eaves, cornices, or belt courses that project not more than two feet from the face of the building wall).

(B) If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high), or by such walls and interior lot lines, and the clear space is 15 feet or more in both dimensions: (i) The area shall be excluded from Gross Floor Area if it is fully open to the sky (except for roof eaves, cornices, or belt courses that project no more than two feet from the face of the building wall); and (ii) The area may have roofed areas along its perimeter which are also excluded from Gross Floor Area if the minimum clear open space between any such roof and the opposite wall or roof (whichever is closer) is maintained at 15 feet (with the above exceptions) and the roofed area does not exceed 10 feet in depth; (iii) In addition, when the clear open area exceeds 625 square feet, a canopy, gazebo, or similar roofed structure without walls may cover up to 10 percent of such open space without being counted as gross floor area.

(C) If, however, 70 percent or less of the perimeter of such an area is enclosed by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the open side or sides face on a yard, street or court whose dimensions satisfy the requirements of this Code and all other applicable codes for instances in which required windows face upon such yard, street, or court, the area may be roofed to the extent permitted by such codes in instances in which required windows are involved;

(11) On lower, nonresidential floors, elevator shafts and other life-support systems serving exclusively the residential uses on the upper floors of a building;

(12) One-third of that portion of a window bay conforming to the requirements of Section 136(d)(2) that extends beyond the plane formed by the face of the façade on either side of the bay, but not to exceed seven square feet per bay window as measured at each floor;

(13) Ground floor area in the C-3-O, C-3-O(SD), C-3-S, C-3-S(SU), and C-3-G Districts, and in the Central SoMa Special Use District devoted to building or pedestrian circulation and building service;

(14) In the C-3-O, C-3-O(SD), C-3-S, C-3-S(SU), and C-3-G Districts, space devoted to personal services, restaurants, and retail sales of goods intended to meet the convenience shopping and service needs of downtown workers and residents, not to exceed 5,000 occupied square feet per use and, in total, not to exceed 75 percent of the area of the ground floor of the building plus the ground level, on-site open space. Said uses shall be located on the ground floor except that, in order to facilitate the creation of more spacious ground floor interior spaces, a portion of the said uses, in an amount to be determined pursuant to the provisions of Section 309, may be located on a mezzanine level;

(15) An interior space provided as an open space feature in accordance with the requirements of Section 138;

(16) Floor area in C-3 and Eastern Neighborhoods Mixed Use Districts devoted to child care facilities, provided that:

(A) Allowable indoor space is no less than 3,000 square feet and no more than 6,000 square feet;

(B) The facilities are made available rent free;

(C) Adequate outdoor space is provided adjacent, or easily accessible, to the facility. Spaces such as atriums, rooftops, or public parks may be used if they meet licensing requirements for child care facilities; and

(D) The space is used for child care for the life of the building as long as there is a demonstrated need. No change in use shall occur without a finding by the Planning Commission that there is a lack of need for child care and that the space will be used for a facility described in subsection (B)(17) below dealing with cultural, educational, recreational, religious, or social service facilities;

(17) Floor area in C-3 and Eastern Neighborhoods Mixed Use Districts permanently devoted to cultural, educational, recreational, religious, or social service facilities available to the general public at no cost or at a fee covering actual operating expenses, provided that such facilities are:

(A) Owned and operated by a nonprofit corporation or institution; or

(B) Are made available rent free for occupancy only by nonprofit corporations or institutions for such functions. Building area subject to this subsection shall be counted as Occupied Floor Area, except as provided in subsections (a) through (f) in the definition for Floor Area, Occupied, for the purpose of calculating the freight loading requirements for the project;

(18) In the C-3-O(SD) District, space devoted to personal services, eating and drinking uses, or retail sales of goods and that is located on the same level as the rooftop park on the Transbay Transit Center and directly accessible thereto by a direct publicly-accessible pedestrian connection meeting the standards of Section 138(j)(1); and

(19) In the C-3-O(SD) District, publicly-accessible space on any story above a height of 600 feet devoted to public accommodation that offers extensive views, including observation decks, sky lobbies, restaurants, bars, or other retail uses, as well as any elevators or other vertical circulation dedicated exclusively to accessing or servicing such space. The space must be open to the general public during normal business hours throughout the year, and may charge a nominal fee for access.

(20) [Expired]

(21) Any area devoted to bicycle parking, bicycle maintenance rooms, or car share spaces when such features are provided as part of a Development Project's compliance with the Transportation Demand Management Program set forth in Section 169 of the Planning Code.

(Amended by Ord. 52-15; Ord. 34-17; Ord. 13-18; Ord. 296-18; see Sec. 102 history note.)

Floor Area, Occupied. Floor area devoted to, or capable of being devoted to, a principal or Conditional Use and its accessory uses. For purposes of computation, "Occupied Floor Area" shall consist of the Gross Floor Area, as defined in this Code, minus the following:

(a) Accessory parking and loading spaces and driveways, and maneuvering areas incidental thereto;

(b) Exterior walls of the building;

(c) Mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself, wherever located in the building;

(d) Restrooms and space for storage and services necessary to the operation and maintenance of the building itself, wherever located in the building;

(e) Space in a retail store for store management, show windows, and dressing rooms, and for incidental repairs, processing, packaging, and stockroom storage of merchandise for sale on the premises; and

(f) Incidental storage space for the convenience of tenants.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Floor Area Ratio. The ratio of the Gross Floor Area of all the buildings on a lot to the area of the lot. In cases in which portions of the gross floor area of a building project horizontally beyond the lot lines, all such projecting gross floor area shall also be included in determining the floor area ratio.

Floor Area, Usable. Generally, the sum of the gross areas of the several floors of a building, measured from the exterior walls or from the center lines of common walls separating two buildings. See alternative definition for the Bernal Heights Special Use District.

Formula Retail. Formula Retail shall have the meaning set forth in Section 303.1 of the Planning Code.

G

Gas Station. A Retail Automotive Use that provides motor fuels, lubricating oils, air, and water directly into motor vehicles and without providing Automotive Repair services, and which also includes self-service operations that sell motor fuel only. This use is subject to the controls in Sections 202.2(b) and 187.1.

(Amended by Ord. 188-15; see Sec. 102 history note.)

General Entertainment. See Entertainment, General.

General Grocery. See Grocery, General.

Gift Store-Tourist Oriented. A Retail Sales and Service Use that involves the marketing of small art goods, gifts, souvenirs, curios, or novelties to the public, particularly those who are visitors to San Francisco rather than local residents.

Grain Elevator. An Industrial Use defined as a storage facility for grain that contains a bucket elevator or a pneumatic conveyor that scoops up grain from a lower level and deposits it in a silo or other storage facility. This use also covers the entire elevator complex including, but not limited to, receiving and testing offices, weighbridges, and storage facilities.

Grocery, General. A Retail Sales and Services Use that:

(a) Offers a diverse variety of unrelated, non-complementary food and non-food commodities, such as beverages, dairy, dry goods, fresh produce and other perishable items, frozen foods, household products, and paper goods;

(b) May provide beer, wine, and/or liquor sales for consumption off the premises with a California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine) or type 21 (off-sale general) that occupy less than 15% of the Occupied Floor Area of the establishment (including all areas devoted to the display and sale of alcoholic beverages);

(c) May prepare minor amounts of food on site for immediate consumption;

(d) Markets the majority of its merchandise at retail prices; and

(e) Shall operate with the specified conditions in Section 202.2(a)(1).

(f) Such businesses require Conditional Use authorization for conversion of a General Grocery use greater than 5,000 square feet, pursuant to Section 202.3 and 303(l).

(Amended by Ord. 188-15; Ord. 129-17; see Sec. 102 history note.)

Grocery, Specialty. A Retail Sales and Services Use that:

(a) Offers specialty food products such as baked goods, pasta, cheese, confections, coffee, meat, seafood, produce, artisanal goods, and other specialty food products, and may also offer additional food and non-food commodities related or complementary to the specialty food products;

(b) May provide beer, wine, and/or liquor sales for consumption off the premises with a California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine) or type 21 (off-sale general) which occupy less than 15% of the Occupied Floor Area of the establishment (including all areas devoted to the display and sale of alcoholic beverages);

(c) May prepare minor amounts of food on site for immediate consumption off-site with no seating permitted; and

(d) Markets the majority of its merchandise at retail prices.

(e) Such businesses that provide food or drink per subsections (b) and (c) above shall operate with the specified conditions in Section 202.2(a)(1).

(Amended by Ord. 188-15; Ord. 129-17; see Sec. 102 history note.)

Gross Floor Area. See Floor Area, Gross

Ground Floor. First Story, as defined under Story, below.

(Added by Ord. 206-19; see Sec. 102 history note.)

Group Housing. A Residential Use that provides lodging or both meals and lodging, without individual or limited cooking facilities or kitchens, by prearrangement for 30 days or more at a time and intended as Long-Term Housing, in a space not defined by this Code as a Dwelling Unit. Except for Group Housing that also qualifies as Student Housing as defined in this Section 102, 100% Affordable Housing as defined in Planning Code Section 315, or housing operated by an organization with tax-exempt status under 26 United States Code Section 501(c)(3) providing access to the unit in furtherance of it^{3} primary mission to provide housing, the residential square footage devoted to Group Housing shall include both common and private space in the following amounts: for every gross square foot of private space (including bedrooms and individual bathrooms), 0.5 gross square feet of common space shall be provided, with at least 15% of the common space devoted to communal kitchens with a minimum of one kitchen for every 15 Group Housing units. Group Housing shall include, but not necessarily be limited to, a Residential Hotel, boardinghouse, guesthouse, rooming house, lodging house, residence club, commune, fraternity or sorority house, monastery, nunnery, convent, or ashram. It shall also include group housing affiliated with and operated by a medical or educational institution, when not located on the same lot as such institution, which shall meet the applicable provisions of Section 304.5 of this Code concerning institutional master plans.

(Amended by Ord. 50-22; see Sec. 102 history note.)

Gym. A Retail Sales and Service Use including a health club, fitness, gymnasium, or exercise facility when including equipment and space for weight-lifting and cardiovascular activities.

(Amended by Ord. 111-21; see Sec. 102 history note.)

H

Hazardous Waste Facility. An Industrial Use that includes any use involving the treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous waste that is produced at an off-site facility, but shall not include a facility that: (1) manages only used oil, used oil filters, latex paint, antifreeze, small household batteries or lead acid batteries; or (2) establishes that it is not required to obtain a hazardous waste facility permit from the State of California. The terms "hazardous waste," "treatment," "transfer," "storage," "disposal," "off-site facility," and "used oil" as used herein shall have the meaning given those terms in the California Health and Safety Code, Division 20, Chapter 6.5, Articles 2 and 13, which are hereby incorporated by reference.

Health Service. See Service, Health.

Heavy Manufacturing. See Manufacturing, Heavy.

Height (of a building or structure). The vertical distance by which a building or structure rises above a certain point of measurement. See Section 260 of this Code for how height is measured.

Historic Building. A Historic Building is a building or structure that meets at least one of the following criteria:

- It is individually designated as a landmark under Article 10;
- It is listed as a contributor to an historic district listed in Article 10, or if the historic district does not list contributors, is determined to be a contributor through historic resource review;
- It is a Significant or Contributory Building under Article 11, with a Category I, II, III or IV rating;

- It has been listed or has been determined eligible for listing in the California Register of Historical Resources; or,
- It has been listed or has been determined eligible for listing in the National Register of Historic Places.

(Added by Ord. 248-23; amended by Ord. 297-24; see Sec. 102 history note.)

Homeless Shelter. A Residential Use defined as living and/or sleeping accommodations without any fee to individuals and families who are homeless, as defined in the Federal Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act of 2009 (S.896), as amended from time to time. Homeless Shelters shall comply with the requirements of the Standards of Care for City Shelters contained in Administrative Code, Chapter 20, Article XIII, including the requirement for operational standards in Section 20.404(d).

Horizontal Elements. All roof areas and all floor plates, except floor plates at or below grade.

Hospital. An Institutional Healthcare Use that includes a hospital, medical center, or other medical institution that provides facilities for inpatient or outpatient medical care and may also include medical offices, clinics, laboratories, and employee or student dormitories and other housing, operated by and affiliated with the institution, which institution has met the applicable provisions of Section 304.5 of this Code concerning Institutional Master Plans.

(Amended by Ord. 188-15; see Sec. 102 history note.)

Hotel. A Retail Sales and Services Use that provides tourist accommodations, including guest rooms or suites, which are intended or designed to be used, rented, or hired out to guests (transient visitors) intending to occupy the room for less than 32 consecutive days. This definition also applies to buildings containing six or more guest rooms designated and certified as tourist units, under Chapter 41 of the San Francisco Administrative Code. For purposes of this Code, a Hotel does not include (except within the Bayshore-Hester Special Use District as provided for in Sections 713 and 780.2 of this Code) a Motel, which contains guest rooms or suites that are independently accessible from the outside, with garage or parking space located on the lot, and designed for, or occupied by, automobile-traveling transient visitors. Hotels shall be designed to include all lobbies, offices, and internal circulation to guest rooms and suites within and integral to the same enclosed building or buildings as the guest rooms or suites.

Hotel, Residential. A Residential Use defined in Chapter 41 of the San Francisco Administrative Code that contains one or more residential hotel units. A residential hotel unit is a guest room, as defined in Section 203.7 of Chapter XII, Part II, of the San Francisco Municipal Code (Housing Code), which had been occupied by a permanent resident on September 23, 1979, or any guest room designated as a residential unit pursuant to Sections 41.6 or 41.7 of Chapter 41 of the San Francisco Administrative Code. Residential hotels are further defined and regulated in the Residential Hotel Unit Conversion and Demolition Ordinance, Chapter 41, of the San Francisco Administrative Code.

Hours of Operation. A commercial Use Characteristic limiting the permitted hours during which any commercial establishment, not including automated teller machines, may be open for business. Other restrictions on the hours of operation of Movie Theaters, Adult Businesses, Adult Sex Venues, Nighttime Entertainment, and General Entertainment Uses shall apply pursuant to provisions in Section 303(p), when such uses are permitted as Conditional Uses. A Pharmacy may qualify for the exception to operate on a 24-hour basis provided in Section 202.2(a)(2) of the Code. The hours of operation of a principally permitted Adult Sex Venue are subject to the provisions in Section 202.2(a)(8).

(Amended by Ord. 129-17; Ord. 202-18; Ord. 75-22; Ord. 70-23; see Sec. 102 history note.)

I

Industrial Use. A Use Category containing the following uses: Agricultural and Beverage Processing 1 and 2, Automobile Wrecking, Automobile Assembly, Grain Elevator, Hazardous Waste Facility, Junkyard, Livestock Processing 1 and 2, Heavy Manufacturing 1, 2, and 3, Light Manufacturing, Metal Working, Ship Yard, Storage Yard, Volatile Materials Storage, and Truck Terminal.

(Amended by Ord. 229-17; Ord. 202-18; see Sec. 102 history note.)

Infrastructure. Open space and recreational facilities; public realms improvements such as pedestrian improvements and streetscape improvements; public transit facilities; and community facilities such as libraries, child care facilities, and community centers.

In-Kind Agreement. An agreement acceptable in form and substance to the City Attorney and the Director of Planning, under which the project sponsor agrees to provide a specific set of community improvements, at a specific phase of construction, in lieu of contribution to the relevant Fund.

In Lieu Fee. A fee paid by a project sponsor in lieu of complying with a requirement of this Code and that is not a development impact fee governed by the Mitigation Fee Act.

Institutional Community Use. A subcategory of Institutional Uses that includes Child Care Facility, Community Facility, Private Community Facility, Job Training, Religious Institution, Social Service or Philanthropic Facility, and Public Facility.

(Amended by Ord. 182-19, see Sec. 102 history note.)

Institutional Education Use. A subcategory of Institutional Uses that includes Post-Secondary Educational Institution, School, and Trade School.

Institutional Healthcare Use. A subcategory of Institutional Uses that includes Hospital, Medical Cannabis Dispensary, and Residential Care Facility.

Institutional Use. A Use Category that includes Child Care Facility, Community Facility, Private Community Facility, Hospital, Job Training, Medical Cannabis Dispensary, Religious Institution, Residential Care Facility, Social Service or Philanthropic Facility, Post-Secondary Educational Institution, Public Facility, School, and Trade School.

(Amended by Ord. 63-20; see Sec. 102 history note.)

Interior Lot. See Lot, Interior.

Intermediate Length Occupancy. A Residential Use characteristic that applies to a Dwelling Unit offered for occupancy by a natural person for an initial stay, whether through lease, subscription, license, or otherwise, for a duration of greater than 30 consecutive days but less than one year. This use characteristic is subject to the requirements of Section 202.10.

(Added by Ord. 78-20; see Sec. 102 history note.)

Internet Service Exchange. A Utility and Infrastructure Use defined as a location that contains any of the following uses (excluding a Wireless Telecommunications Services Facility): switching equipment (whether wireline or wireless) that joins or connects occupants, customers, or subscribers to enable customers or subscribers to transmit data, voice or video signals to each other; one or more computer systems and related equipment used to build, maintain, or process data, voice or video signals, and provide other data processing services; or a group of network servers.

(Amended by Ord. 166-16; see Sec. 102 history note.)

J

Jewelry Store. A Retail Sales and Service Use that primarily involves the sale of jewelry to the general public. It may involve sales of precious stones, gems, precious metals, gold and silver, or clocks and watches. Repair services or setting, custom design or manufacture of individual pieces of jewelry may also be provided.

Job Training. A Institutional Community Use that provides job training and may also provide vocational counseling and job referrals.

Junk Yard. An Industrial Use defined as an outdoor space where junk, waste, discarded or salvaged materials are stored or handled, including house-wrecking yards, used lumber yards, and places or yards for storage of salvaged house wrecking and structural steel materials and equipment, excluding automobile wrecking operations, which is defined as a separate use in this Section of the Code; yards or establishments for the sale, purchase, or storage of used cars or machinery in operable condition; and the processing of used, discarded, or salvaged materials as part of a permitted manufacturing operation in the same premises.

K

Kennel. A Retail Sales and Services Use where dogs, or dogs and cats, are boarded for compensation, or are cared for or trained for hire, or are kept for sale or bred for sale, where the care, breeding, or sale of the dogs, or dogs and cats, is the principal means of livelihood of the occupants of the premises.

(Amended by Ord. 111-21; see Sec. 102 history note.)

L

Laboratory. A Non-Retail Sales and Services Use intended or primarily suitable for scientific research. The space requirements of uses within this category include specialized facilities and/or built accommodations that distinguish the space from Office uses, Light Manufacturing, or Heavy Manufacturing. Examples of laboratories include the following:

(a) Chemistry, biochemistry, or analytical laboratory;

(b) Engineering laboratory;

(c) Development laboratory;

(d) Biological laboratories including those classified by the Centers for Disease Control (CDC) and National Institutes of Health (NIH) as Biosafety level 1, Biosafety level 2, or Biosafety level 3;

(e) Animal facility or vivarium, including laboratories classified by the CDC/NIH as Animal Biosafety level 1, Animal Biosafety level 2, or Animal Biosafety level 3;

(f) Support laboratory;

(g) Quality assurance/Quality control laboratory;

(h) Core laboratory; and

(i) Cannabis testing facility (any use requiring License Type 8—Testing Laboratory, as defined in California Business and Professions Code, Division 10).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Large-Scale Urban Agriculture. See Agriculture, Large Scale Urban.

Laundromat. A Retail Sales and Service Use that is used for the purpose of washing, drying, dry cleaning, starching, or ironing, for the general public, wearing apparel, household linens, or other washable fabrics, or a place used or maintained for the storage, collection, or delivery of such articles for such service. A Laundromat use shall include any place, whether self-service or otherwise, maintained for the general public for the purpose of washing and drying wearing apparel, household linens, or other washable fabrics, by coin-operated, or card-operated laundry machinery.

(Amended by Ord. 209-21; see Sec. 102 history note.)

Length (of a Building or Structure). See Plan Dimensions.

(Added by Ord. 206-19; see Sec. 102 history note.)

Licensed Child Care Facility. A child care facility that has been issued a valid license by the California Department of Social Services pursuant to California Health and Safety Code Sections 1596.80-1596.875, 1596.95-1597.09, or 1597.30-1597.61.

Life Science. A Non-Retail Sales and Service Use that involves the integration of natural and engineering sciences and advanced biological techniques using organisms, cells, and parts thereof for products and services. This includes the creation of products and services used to analyze and detect various illnesses, the design of products that cure illnesses, and/or the provision of capital goods and services, machinery, instruments, software, and reagents related to research and production. Life Science uses may utilize office, laboratory, light manufacturing, or other types of space. As a subset of Life Science uses, Life Science laboratories typically include biological laboratories and animal facilities or vivaria, as described in the Laboratory definition Subsections (d) and (e).

Light Manufacturing. See Manufacturing, Light.

Limited Live Performance. An Accessory Use as defined in Section 1060 of the Police Code

Limited Restaurant. See Restaurant, Limited.

Liquor Store. A Retail Sales and Service Use that sells beer, wine, or distilled spirits to a customer in an open or closed container for consumption off the premises and that needs a State of California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine) or type 21 (off-sale general) This classification shall not include retail uses that:

(a) are both (1) classified as a General Grocery, a Specialty Grocery, or a Restaurant- Limited, and (2) have a Gross Floor Area devoted to alcoholic beverages that is within the applicable accessory use limits for the use district in which it is located, or

(b) have both (1) a Non-residential Use Size of greater than 10,000 gross square feet and (2) a gross floor area devoted to alcoholic beverages that is within accessory use limits as set forth in Section 204.3 or Section 703(d) of this Code, depending on the zoning district in which the use is located.

(c) For purposes of Planning Code Sections 249.5, 781.8, 781.9, 782, and 784, the retail uses explicitly exempted from this definition as set forth above shall only apply to General Grocery and Specialty Grocery stores that exceed 5,000 square feet in size and shall not:

(1) sell any malt beverage with an alcohol content greater than 5.7 percent by volume; any wine with an alcohol content of greater than 15 percent by volume, except for “dinner wines” that have been aged two years or more and maintained in a corked bottle; or any distilled spirits in container sizes smaller than 600 milliliters;

(2) devote more than 15 percent of the gross square footage of the establishment to the display and sale of alcoholic beverages; and

(3) sell single servings of beer in container sizes 24 ounces or smaller.

Liquor Store uses are subject to the operating conditions of Section 202.2(a)(6). Where conditionally permitted, the Conditional Use authorization shall also satisfy the conditions of Section 303(z).

(Amended by Ord. 129-17; Ord. 182-19; see Sec. 102 history note.)

Livery Stable. A Retail Entertainment, Arts and Recreation Use where horses and carriages are kept for hire and where stabling is provided. This use also includes horse riding academies.

Livestock Processing 1. An Industrial Use that involves the live storage, killing or dressing of poultry, rabbits or other small livestock, and/or the tanning or curing of raw hides or skins from an animal of any size. Direct sales to customers is permitted on site. This use is subject to the location and operating restrictions in Section 202.2(d).

Livestock Processing 2. An Industrial Use that involves the live storage, killing or dressing of cows, pigs, goats, and other large livestock and/or the tanning or curing of raw hides or skins from an animal of any size. Direct sales to customers is permitted on site. This use is subject to the location and operating restrictions in Section 202.2(d).

Live/Work Project. A Housing Project containing more than one Live/Work Unit.

Live/Work Unit. A hybrid Residential and PDR Use that is defined as a structure or portion of a structure combining a residential living space for a group of persons including not more than four adults in the same unit with an integrated work space principally used by one or more of the residents of that unit; provided, however, that no otherwise qualifying portion of a structure that contains a Group A occupancy under the Building Code shall be considered a Live/Work Unit. No City official, department, board, or commission shall issue or approve a building permit or other land use entitlement authorizing a new live/work unit as defined here, except as authorized under Section 210.5, or as an accessory use under Section 204.4. Lawfully approved live/work units are subject to the provisions of Sections 181 and 317 of this Code.

(Amended by Ord. 122-23; Ord. 159-23; see Sec. 102 history note.)

Long Term Housing. Housing intended for occupancy by a person or persons for 32 consecutive days or longer.

Lot. A parcel of land under one ownership that constitutes, or is to constitute, a complete and separate functional unit of development, and that does not extend beyond the property lines along streets or alleys. A lot as so defined generally consists of a single Assessor's lot, but in some cases consists of a combination of contiguous Assessor's lots or portions thereof where such combination is necessary to meet the requirements of this Code. In order to clarify the status of specific property as a lot under this Code, the Zoning Administrator may, consistent with the provisions of this Code, require such changes in the Assessor's records, placing of restrictions on the land records, and other actions as may be necessary to assure compliance with this Code. The definition of "lot" shall also be applicable to piers under the jurisdiction of the Port Commission.

Lot, Corner. A lot bounded on two or more adjoining sides by streets that intersect adjacent to such lot, provided that the angle of intersection of such streets along such lot does not exceed 135 degrees. For the purposes of this Code, no Corner Lot shall be considered wider or deeper than 125 feet, and the remainder of any lot involved shall be considered to be an Interior Lot. Whenever a Corner Lot is resubdivided, only that portion which thereafter is bounded on adjoining sides by streets as herein described shall be a Corner Lot.

Lot, Interior. A lot other than a Corner Lot.

Lot Size (Per Development). The permitted gross lot area for new construction or expansion of existing development.

M

Mandatory Discretionary Review. A hearing before the Planning Commission that is required by the Planning Code at which the Commission will determine whether to approve, modify, or disapprove a permit application.

Manufacturing 1, Heavy. An Industrial Use having the potential of creating substantial noise, smoke, dust, vibration, and/or other environmental impacts or pollution, and including, but not limited to:

(a) Concrete mixing, concrete products manufacture,

(b) Electric foundry or foundry for nonferrous metals

(c) Enameling, lacquering, wholesale paint mixing from previously prepared pigments and vehicles,

(d) Woodworking mill, manufacture of woodfibre, sawdust or excelsior products not involving chemical processing,

(e) Blast furnace, rolling mill, or smelter; and

(f) Ice manufacturing plant.

This use is subject to the location and operation controls in Section 202.2(d)

Manufacturing 2, Heavy. An Industrial Use having the potential of creating substantial noise, smoke, dust, vibration, and/or other environmental impacts or pollution, and including, but not limited to:

(a) Production or refining of petroleum products, excluding such products used solely as fuel sources;

(b) Rendering or reduction of fat, bones, or other animal material, where adequate provision is made for the control of odors through the use of surface condensers and direct-flame afterburners or equivalent equipment;

(c) Incineration of garbage, refuse, dead animals or parts thereof;

This use is subject to the controls in Section 202.2(d).

(Amended by Ord. 217-21; see Sec. 102 history note.)

Manufacturing 3, Heavy. An Industrial Use having the potential of creating substantial noise, smoke, dust, vibration, and/or other environmental impacts or pollution, and including, but not limited to:

(a) Battery manufacture;

(b) Manufacture of corrosive acid or alkali, cement, gypsum, lime, plaster of Paris, explosive, fertilizer, glue or gelatin from fish or animal refuse;

(c) Manufacture, refining, distillation, or treatment of any of the following: abrasives, acid (noncorrosive), alcohol, ammonia, asbestos, asphalt, bleaching powder, candles (from tallow), celluloid, chlorine, coal, coke, creosote, dextrine, disinfectant, dye, enamel, gas carbon or lampblack, gas (acetylene or other inflammable), glucose, insecticide, lacquer, linoleum, matches, oilcloth, oil paint, paper (or pulp), petroleum products (excluding such products used solely as fuel sources), perfume, plastics, poison, potash, printing ink, refuse mash or refuse grain, rubber (including balata or gutta-percha or crude or scrap rubber), shellac, shoe or stove polish, soap, starch, tar, turpentine, or varnish.

(d) Foundry, structural iron or pipe works, boilermaking where riveting is involved, locomotive works, roundhouse or railroad shop.

This use is subject to the location and operation controls in Section 202.2(d)

(Amended by Ord. 217-21; see Sec. 102 history note.)

Manufacturing, Light. An Industrial Use that provides for the fabrication or production of goods, by hand or machinery, for distribution to retailers or wholesalers for resale off the premises, primarily involving the assembly, packaging, repairing, or processing of previously prepared materials. Light manufacturing uses include production and custom activities usually involving individual or special design, or handiwork, such as the following fabrication or production activities, as may be defined by the Standard Industrial Classification Code Manual as light manufacturing uses:

(a) Food processing;

(b) Apparel and other garment products;

(c) Furniture and fixtures;

(d) Printing and publishing of books or newspapers;

(e) Leather products;

(f) Pottery;

(g) Glass-blowing;

(h) Commercial laundry, rug cleaning, and dry cleaning facility;

(i) Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks; or

(j) Manufacture of cannabis products or cannabis extracts that are derived without the use of volatile organic compounds (any use requiring License Type 6—Manufacturer 1, as defined in California Business and Professions Code, Division 10).

It shall not include Trade Shop, Agricultural and Beverage Processing 1 or 2, or Heavy Manufacturing 1, 2, or 3. This use is subject to the location and operation controls in Section 202.2(d).

(Amended by Ord. 229-17; Ord. 111-21; see Sec. 102 history note.)

Maritime Use. A Use Characteristic defined as any use that requires access to or use of San Francisco Bay waters in order to function or operate in the normal course of business including, but not limited to, uses associated with waterborne commerce, navigation, fisheries, and recreation, and industrial, commercial, and other operations directly related to the conduct of waterborne commerce, navigation, fisheries, or recreation on property subject to public trust. Maritime Uses also includes houseboats or residential uses on the water.

Marquee. A permanent roofed structure attached to and supported entirely by a building, including any object or decoration attached to or part of said marquee, no part of which shall be used for occupancy or storage, with the purpose of providing protection from sun and rain and/or embellishment of the façade, as further regulated in Section 3106 of the Building Code.

Massage, Chair/Foot. A Retail Sales and Service Use where the only massage service provided is chair or foot massage, such service is visible to the public, and customers are fully clothed at all times.

Massage Establishment. A Retail Sales and Service Use defined by Section 29.5 of the Health Code. For purposes of the Planning Code only, “Massage Establishment” shall include a “Massage Establishment” but shall not include a “Sole Practitioner Massage Establishment,” as these terms are defined in Section 29.5 of the Health Code. The Massage Establishment shall first obtain a permit from the Department of Public Health pursuant to Section 29.25 of the Health Code, or a letter from the Director of the Department of Public Health certifying that the establishment is exempt from such a permit under Section 29.25 of the Health Code

(Amended by Ord. 73-15; Ord. 63-20; Ord. 233-21; Ord. 37-22; see Sec. 102 history note.)

Medical Cannabis Dispensary. An Institutional Healthcare Use that is either (a) a cooperative or collective operating under the authority of a permit issued by the Director of Health under Article 33 of the Health Code, or (b) a Medicinal Cannabis Retailer as defined in Police Code Section 1602. A Medical Cannabis Dispensary Use is permitted only if it meets the conditions listed in Section 202.2(e).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Metal Working. An Industrial use that includes metal working or blacksmith shop; excluding presses of over 20 tons' capacity and machine-operated drop hammers. This use is subject to location and operational controls in Section 202.2(d).

Mobile Food Facility. Any vehicle or pushcart used in conjunction with a commissary or other permanent food facility upon which food is sold or distributed at retail prices. Mobile Food Facility does not include a “Transporter” used to transport packaged food from a food facility or other approved source to the consumer. A Mobile Food Facility does not include any use that sells goods, wares, or merchandise other than food or drink intended for human consumption. For the purposes of the Planning Code, a Mobile Food Facility that is a temporary Use is regulated as an intermittent activity, per Section 205.4; a Mobile Food Facility that exceeds the limitations set forth in Section 205.4 is considered a Restaurant or Limited Restaurant Use, as defined in this Section 102, and is regulated as such by the Use controls for the respective zoning district. Mobile Food Facilities shall comply with the good neighbor policies set forth in Public Works Code Section 184.94 as well as Planning Code Section 202.2(a)(1).

(Amended by Ord. 129-17; see Sec. 102 history note.)

MOH. The Mayor's Office of Housing and Community Development or its successor.

Mortuary. A Retail Sales and Services Use that provides funeral services, funeral preparation, or burial arrangements, including retail establishments that predominantly sell or offer for sale caskets, tombstones, or other funerary goods. In RH, RM, RTO, and RC Districts only, this use includes Columbarium use, which provides for the storage of cremated remains in niches.

Motel. A Retail Sales and Services Use that includes an auto court, motor lodge, tourist court, or other facility similarly identified, contains rooms or suites of rooms, none with individual cooking facilities, which are offered for compensation and are primarily for the accommodation of transient guests traveling by automobile, and where each sleeping unit is independently accessible from the outside. This use is subject to the controls listed in Section 202.2(a).

Movie Theater. A Retail Entertainment, Arts and Recreation Use that displays motion pictures, videos, slides, or closed-circuit television pictures. This use does not include an adult theater, which is regulated as an Adult Business. Removal of a Movie Theater is subject to the controls in Section 202.4.

MTA. The Municipal Transportation Agency or its successor.

MTA Director. The Director of MTA or his or her designee.

Municipal Railway (Muni). The public transit system owned by the City and under the jurisdiction of the MTA.

N

Neighborhood Agriculture. See Agriculture, Neighborhood.

Neighborhood-Serving Business. A neighborhood-serving business cannot be defined by the type of use, but rather by the characteristics of its customers, types of merchandise or service, its size, trade area, and the number of similar establishments in other neighborhoods. The primary clientele of a "neighborhood-serving business," by definition, is comprised of customers who live and/or work nearby.

While a neighborhood-serving business may derive revenue from customers outside the immediately surrounding neighborhood, it is not dependent on out-of-neighborhood clientele.

A neighborhood-serving use provides goods and/or services which are needed by residents and workers in the immediate neighborhood to satisfy basic personal and household needs on a frequent and recurring basis, and which if not available require trips outside of the neighborhood.

A use may be more or less neighborhood-serving depending upon its trade area. Uses that, due to the nature of their products and service, tend to be more neighborhood-serving are those which sell convenience items such as groceries, personal toiletries, magazines, and personal services such as cleaners, laundromats, and film processing. Uses that tend to be less neighborhood-oriented are those which sell more specialized, more expensive, less frequently purchased comparison goods such as automobiles and furniture.

For many uses (such as stores selling apparel, household goods, and variety merchandise), whether a business is neighborhood-serving depends on the size of the establishment: the larger the use, the larger the trade area, hence the less neighborhood-oriented.

Whether a business is neighborhood-serving or not also depends in part on the number and availability of other similar establishments in other neighborhoods: the more widespread the use, the more likely that it is neighborhood-oriented.

Net Addition. The total amount of gross floor area defined in Planning Code Section 102 contained in a development project, less the gross floor area contained in any structure demolished or retained as part of the proposed development project.

Nighttime Entertainment. See Entertainment, Nighttime.

Non-Auto Vehicle Sales or Rental. A Retail Sales and Service Use offering new or used bicycles, scooters, motorcycles, boats, or other marine vehicles for sale, rent, or lease when conducted entirely within an enclosed building.

Non-Commercial Entertainment and Recreation. See Entertainment and Recreation, Non-Commercial.

Nonprofit Organization. An organization organized and operated for nonprofit purposes within the provisions of California Revenue and Taxation Code Sections 23701-23710, inclusive, as demonstrated by a written determination from the California Franchise Tax Board exempting the organization from taxes under Revenue and Taxation Code Section 23701.

Non-Residential Use. Space within any structure or portion thereof intended or primarily suitable for, or accessory to, occupancy by retail, office, commercial, or uses other than a Residential Use as defined in this Section. For the purposes of Article 4, residential components of Institutional Uses other than Religious Institutions shall be defined as a "residential use," and non-residential use shall not include PDR and publicly owned and operated community facilities.

Non-Residential Use Size. The permitted gross floor area allowed each individual non-residential use. Gross Floor Area is defined in this Section of the Code.

Non-Retail Use. A type of Commercial Use that involves the sale of goods or services to other businesses rather than the end user, or that does not provide for direct sales to the general public on site. Uses in this category include, but are not limited to, Non-Retail Sales and Service Uses and Non-Retail Automotive Uses.

Notice of Special Restrictions. A document recorded with the San Francisco Recorder’s Office detailing specific restrictions placed on an Assessor’s lot that are typically associated with an approval action by the Planning Department, Planning Commission, Zoning Administrator, or other City agency.

(Amended by Ord. 202-18; see Sec. 102 history note.)

O

Occupied Floor Area. See Floor Area, Occupied.

Office, General. A Non-Retail Sales and Service Use that includes space within a structure or portion thereof intended or primarily suitable for occupancy by persons or entities which perform, provide for their own benefit, or provide to others at that location, services including, but not limited to, the following: professional, banking, insurance, management, consulting, technical, sales, and design; and the non-accessory office functions of manufacturing and warehousing businesses, multimedia, software development, web design, electronic commerce, and information technology. This use shall exclude Non-Retail Professional Services as well as Retail Uses; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; wholesale shipping, receiving and storage; and design showrooms or any other space intended and primarily suitable for display of goods.

Office Use. A grouping of uses that includes General Office, Retail Professional Services, and Non-Retail Professional Services. This use shall exclude: retail uses other than Retail Professional Services; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; wholesale shipping, receiving and storage; and design showrooms or any other space intended and primarily suitable for display of goods.

(Amended by Ord. 249-23, see Sec. 102 history note.)

One Ownership. Ownership of a parcel or contiguous parcels of property or possession thereof under a contract to purchase by a person or persons, firm, corporation or partnership, individually, jointly, in common, or in any other manner whereby such property is under single or unified control. The term shall include condominium ownership. The term "owner" shall mean the person, firm, corporation or partnership exercising one ownership as herein defined.

Open Air Sales. A Commercial Use Characteristic generally categorized as a Retail Sales and Service Use that involves open air sale of new and/or used merchandise, except vehicles, but including agricultural products, plants and gardening supplies, building materials, crafts, and/or art work.

(Amended by Ord. 182-19, see Sec. 102 history note.)

Open Recreation Area. A Non-Commercial Entertainment, Arts and Recreation Use that is not publicly owned which is not screened from public view, has no structures other than those necessary and incidental to the open land use, is not operated as a gainful business, and is devoted to outdoor recreation such as golf, tennis, or riding.

Open Space, Required. Any front setbacks, side or rear yards, courts, usable open space or other open area provided in order to meet the requirements of this Code.

Open Use. Any use of a lot that is not conducted within a Building.

Ornamental Fencing. A decorative metal fence made of wrought iron or fencing that gives the appearance of wrought-iron fencing, but expressly excludes plastic-based materials, barbed wire, similar non-decorative fences as well as traditional chain-link or woven wire fences. Chain-link or woven wire fences may be used if the fencing visible from the public right-of-way is bordered by rails on the top and bottom and has well-built columns that are at least 8 inches wide and are topped with caps. The columns shall be spaced no more than 8 feet apart.

Outdoor Activity Area. A Commercial Use characteristic defined as an area associated with a legally established use, not including primary circulation space or any public street, located outside of a building or in a courtyard, which is provided for the use or convenience of patrons of a commercial establishment including, but not limited to, sitting, eating, drinking, dancing, and food-service activities.

P

Parcel Delivery Service. See Service, Parcel Delivery.

Parking Garage, Private. A Non-Retail Automotive Use that provides temporary parking accommodations for automobiles, trucks, vans, bicycles, or motorcycles in a garage not open to the general public, without parking of recreational vehicles, mobile homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Parking Garage, Public. A Retail Automotive Use that provides temporary parking accommodations for automobiles, trucks, vans, bicycles, or motorcycles in a garage open to the general public, without parking of recreational vehicles, mobile homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Parking Lot, Private. A Non-Retail Automotive Use that provides temporary off-street parking accommodations for private automobiles, trucks, vans, bicycles, or motorcycles on an open lot or lot surrounded by a fence or wall not open to the general public, without parking of recreational vehicles, motor homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Parking Lot, Public. A Retail Automotive Use that provides temporary parking accommodations for private automobiles, trucks, vans, bicycles, or motorcycles on an open lot or lot surrounded by a fence or wall open to the general public, without parking of recreational vehicles, motor homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Passive Outdoor Recreation. A Non-Commercial Entertainment, Arts and Recreation Use defined as an open space used for passive recreational purposes that is not publicly owned and is not screened from public view, has no structures other than those necessary and incidental to the open land use, is not served by vehicles other than normal maintenance equipment, and has no retail or wholesale sales on the premises. Such open space may include, but not necessarily be limited to, a park, playground, or rest area.

PDR Use. See Production, Distribution, and Repair Use.

Permeable Surface. Permeable Surfaces are those that allow water to infiltrate the underlying soils. Permeable Surfaces shall include, but not be limited to, vegetative planting beds, porous asphalt, porous concrete, single-sized aggregate, open-jointed blocks, stone, pavers, or brick that are loose-set and without mortar. Permeable Surfaces are required to be contained so neither sediment nor the permeable surface material discharges off the site.

(Amended by Ord. 202-18; see Sec. 102 history note.)

Pharmacy. A Retail Sales and Service Use in which the profession of pharmacy is practiced and where prescriptions are compounded

and offered for sale. This Section shall not be construed to limit any qualifying pharmacy from offering other retail goods in addition to prescription pharmaceuticals. Pharmacies are subject to controls in Section 202.2(a).

Philanthropic Facility. See Social Service or Philanthropic Facility.

Plan Dimensions. The linear horizontal dimensions of a building or structure, at a given level, between the outside surfaces of its exterior walls. The "length" of a building or structure is the greatest plan dimension parallel to an exterior wall or walls and is equivalent to the horizontal dimension of the corresponding elevation of the building or structure at that level. The "diagonal dimension" of a building or structure is the plan dimension between the two most separated points on the exterior walls.

Planning Commission (Commission). The San Francisco Planning Commission.

Planning Department (Department). The San Francisco Planning Department. For purposes of Article 4, may include the Planning Department's designee, including the Mayor's Office of Housing and other City agencies or departments.

Post-Secondary Educational Institution. An Institutional Education Use, public or private, that is certified by the Western Association of Schools and Colleges, provides educational services such as a college or university, and has met the applicable provisions of Section 304.5 of this Code concerning institutional master plans. Such institution may include employee or student dormitories and other housing operated by and affiliated with the institution. Such institution shall not have industrial arts as its primary course of study.

Power Plant. A Industrial Use defined as a steam, fossil-fuel, or any other type of thermal power plant. A Power Plant shall mean each individual power generation unit capable of independent operation, but shall not include on-site power generation units less than ten megawatts in size. Intensification of a Power Plant use requires Conditional Use authorization per Section 178(c), and is subject to the controls in Section 202.2(d).

Principal Façades. See Façades, Principal.

Principal (or Principally Permitted) Use. A Use permitted as of right in each established district where listed for that class of district in Articles 2, 7, 8, or 9 and as regulated in this Code. Principally permitted uses may be required to comply with the Operating Conditions of Section 202.2.

(Added by Ord. 129-17; see Sec. 102 history note.)

Production, Distribution, and Repair (PDR) Use. A grouping of uses that includes, but is not limited, to all Industrial and Agricultural Uses, Ambulance Services, Animal Hospital, Automotive Service Station, Automotive Repair, Automotive Wash, Arts Activities, Business Services, Catering, Commercial Storage, Kennel, Motor Vehicle Tow Service, Livery Stable, Parcel Delivery Service, Public Utilities Yard, Storage Yard, Trade Office, Trade Shop, Wholesale Sales, and Wholesale Storage.

(Amended by Ord. 202-18; Ord. 111-21; see Sec. 102 history note.)

Public Facility. An Institutional Use that consists of publicly or privately owned use that provides public services to the community, whether conducted within a building or on an open lot, and which has operating requirements that necessitate location within the district and is in compliance with the General Plan, including civic structures (such as museums, post offices, administrative offices of government agencies), public libraries, police stations, and transportation facilities. Such use shall not include service yards, machine shops, garages, incinerators, Utility Installations, and publicly operated parking in a garage or lot (Public Automobile Parking Garages and Public Parking Lots).

(Amended by Ord. 202-18; see Sec. 102 history note.)

Public Transportation Facility. A Utility and Infrastructure Use involving passenger terminal facilities for mass transportation of a single or combined modes including, but not limited to, aircraft, ferries, fixed-rail vehicles and buses, whether public or privately owned or operated, when in conformity with the General Plan. In Districts where such uses are permitted, conditional use authorization shall be required if the facility is: (a) an Automotive Use, as defined in this Section; and (b) other than a boarding platform, bus stop, transit shelter, or similar ancillary feature of a transit system; or(c) a landing field for aircraft.

Public Utilities Yard. A Utility and Infrastructure Use that is defined as a service yard for public utility, or public use of a similar character, if conducted entirely within an area completely enclosed by a wall or concealing fence not less than six feet high.

Q

None.

R

Rear Façade. See Façade, Rear.

Recreation. See Entertainment and Recreation Use.

Religious Institution. An Institutional Community Use with a tax-exempt status as a religious institution granted by the United States Government and that is used primarily for collective worship or ritual or observance of common religious beliefs. Such institution may include, on the same lot, the housing of persons who engage in supportive activity for the institution.

Replacement of Use. The total amount of Gross Floor Area, as defined in Section 102 of this Code, to be demolished and reconstructed by a development project.

Reproductive Health Clinic. A Retail Sales and Service Use that is a clinic licensed pursuant to applicable provisions of the California Health and Safety Code that meets both of the following requirements: a) provides directly to patients medical services consisting of Abortions or Emergency Contraception as those terms are defined in Administrative Code Section 93.3; and b) primarily specializes in

reproductive health services as defined in California Penal Code 423.1. A Reproductive Health Clinic that meets the foregoing requirements may also provide additional medical and allied health services by physicians or other healthcare professionals.

(Added by Proposition O, 11/5/2024; see Sec. 102 history note.)

Required Open Space. See Open Space, Required.

Residential Building. Any structure containing one or more Residential Units as a principal use, regardless of any other uses present in the building.

Residential Care Facility. An Institutional Healthcare Use providing lodging, board and care for a period of 24 hours or more to persons in need of specialized aid by personnel licensed by the State of California. Such facility shall display nothing on or near the facility that gives an outward indication of the nature of the occupancy except for a sign as permitted by Article 6 of this Code, shall not provide outpatient services, and shall be located in a structure which remains residential in character. Such facilities shall include, but not necessarily be limited to, a board and care home, family care home, long-term nursery, orphanage, rest home or home for the treatment of addictive, contagious or other diseases, or psychological disorders.

Residential Hotel. See Hotel, Residential.

Residential Unit. A legal conforming or non-conforming Dwelling Unit or a legal non-conforming Live/Work Unit

Residential Use. A Use Category consisting of uses that provide housing for San Francisco residents, rather than visitors, including Dwelling Units, Group Housing, Residential Hotels, Senior Housing, Homeless Shelters, and for the purposes of Article 4 only any residential components of Institutional Uses. Single Room Occupancy, Intermediate Length Occupancy, and Student Housing designations are considered characteristics of certain Residential Uses.

(Amended by Ord. 129-17; Ord. 63-20; Ord. 78-20; see Sec. 102 history note.)

Retail Workspace. A Retail Sales and Service Use open to the general public that provides space to work that is made available on a daily or hourly basis. Such use is only permitted as a principal use in conjunction with the concurrent operation of a principally or conditionally permitted Eating and Drinking Use, which Eating and Drinking Use shall (a) occupy no less than one-third of the gross floor area of the premises and (b) face the street. A Retail Workspace may provide services to the business community along with services to the general public. If the Retail Workspace exclusively provides services to the business community, it shall be considered a General Office Use as defined in the Planning Code.

(Added by Proposition H, 11/3/2020; see Sec. 102 history note.)

Restaurant. A Retail Sales and Service use that serves prepared, ready-to-eat cooked foods to customers for consumption on the premises and which has seating. As a minor and incidental use, it may serve such foods to customers for off-site consumption. It may provide on-site beer, wine, and/or liquor sales for drinking on the premises (with ABC license types 02, 23, 41, 47, 49, 59, 75, or 87); however, if it does so, it shall be required to operate as a Bona Fide Eating Place. It is distinct and separate from a Limited-Restaurant. Such businesses shall operate with the specified conditions in Section 202.2(a)(1).

It shall not be required to operate within an enclosed building so long as it is also a Mobile Food Facility. Any associated outdoor seating and/or dining area is subject to regulation as an Outdoor Activity Area as set forth elsewhere in this Code.

(Amended by Ord. 188-15; 129-17; Ord. 205-19; see Sec. 102 history note.)

Restaurant, Limited. A Retail Sales and Service Use that serves ready-to-eat foods and/or drinks to customers for consumption on or off the premises, that may or may not have seating. It may include wholesaling, manufacturing, or processing of foods, goods, or commodities on the premises as an Accessory Use as set forth in Sections 204.3 or 703(d), 803.2(d), 803.3(b)(1)(C) and 825(c)(1)(C) depending on the zoning district in which it is located. It includes, but is not limited to, foods provided by sandwich shops, coffee houses, pizzerias, ice cream shops, bakeries, delicatessens, and confectioneries meeting the above characteristics, but is distinct from a Specialty Grocery, Restaurant, and Bar. Within the North Beach SUD, it is also distinct from Specialty Food Manufacturing, as defined in Section 780.3(b). It shall not provide on-site beer and/or wine sales for consumption on the premises, but may sell beer and/or wine for consumption off the premises with a California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine), if all areas devoted to the display and sale of alcoholic beverages occupy less than 15% of the Occupied Floor Area of the establishment. Such businesses shall operate with the specified conditions in Section 202.2(a)(1).

(Amended by Ord. 129-17; Ord. 202-18; Ord. 285-18; Ord. 63-20; see Sec. 102 history note.)

Retail Entertainment, Arts and Recreation. See Entertainment, Arts and Recreation, Retail.

Retail Sales and Service, General. A Retail Sales and Service Use that provides goods and/or services to the general public and that is not listed as a separate Retail Sales and Service Use in this Section 102. This use includes, but is not limited to the sale or provision of the following goods and services:

(a) Personal items such as tobacco and magazines;

(b) Household goods and service (including paint, fixtures, and hardware, but excluding other building materials);

(c) Variety merchandise, pet supply stores, and pet grooming services;

(d) Florists and plant stores;

(e) Apparel and accessories;

(f) Antiques, art galleries, art supplies, and framing service;

(g) Home furnishings, furniture, and appliances;

(h) Books, stationery, greeting cards, office supplies, copying service, music, and sporting goods; and

(i) Toys, gifts, and photographic goods and services.

(Amended by Ord. 129-17; Ord. 285-18; Ord. 111-21; Ord. 209-21; see Sec. 102 history note.)

Retail Use. A Commercial Use that includes uses that involve the sale of goods, typically in small quantities, or services directly to the ultimate consumer or end user including, but not limited to, Retail Sales and Service Uses, some Entertainment, Arts and Recreation Uses, and Retail Automotive Uses.

(Amended by Ord. 129-17; see Sec. 102 history note.)

S

Sales and Services, Non-Retail. A Commercial Use category that includes Uses that involve the sale of goods or services to other businesses rather than the end user, or that does not provide for direct sales to the consumer on site. Uses in this category include, but are not limited to: Business Services, Catering, Commercial Storage, Design Professional, General Office, Laboratory, Life Science, Non-Retail Professional Service, Trade Office, Wholesale Sales, and Wholesale Storage.

(Amended by Ord. 129-17; Ord. 249-23; see Sec. 102 history note.)

Sales and Services, Retail. A Commercial Use category that includes Uses that involve the sale of goods, typically in small quantities, or services directly to the ultimate consumer or end user with some space for retail service on site, excluding Retail Entertainment Arts and Recreation, and Retail Automobile Uses and including, but not limited to: Adult Business, Animal Hospital, Bar, Cannabis Retail, Chair and Foot Massage, Tourist Oriented Gift Store, General Grocery, Specialty Grocery, Gym, Hotel, Jewelry Store, Kennel, Laundromat, Liquor Store, Massage Establishment, Mortuary (Columbarium), Motel, Non-Auto Sales, Pharmacy, Restaurant, Limited Restaurant, General Retail Sales and Service, Financial Service, Fringe Financial Service, Limited Financial Service, Health Service, Personal Service, Retail Professional Service, Self-Storage, Tobacco Paraphernalia Establishment, and Trade Shop.

(Amended by Ord. 188-15; Ord. 129-17; Ord. 229-17; Ord. 111-21; Ord. 209-21; Ord. 249-23; see Sec. 102 history note.)

San Francisco. The City and County of San Francisco.

School. An Institution Educational Use, public or private, certified by the Western Association of Schools and Colleges that provides educational instruction to students in kindergarten through twelfth grade. Such institution may include employee or student dormitories and other housing operated by and affiliated with the institution. This use is distinct and separate from a Post-Secondary Educational Institution, which is defined under this Section of the Code.

Senior Housing. A Residential Use defined as dwellings that are specifically designed for and occupied by senior citizens. Senior Housing is subject to the conditions listed in Section 202.2(f).

(Amended by Ord. 63-20; see Sec. 102 history note.)

Service, Ambulance. A Non-Retail Automotive Use that provides medically related transportation services.

Service, Business. A Non-Retail Sales and Service Use that provides the following kinds of services primarily to businesses and/or to the general public and does not fall under the definition of Office: radio and television stations, newspaper bureaus, magazine and trade publication publishing, microfilm recording, slide duplicating, bulk mail services, parcel shipping services, parcel labeling and packaging services, messenger delivery/courier services, sign painting and lettering services, non-vehicular equipment rental, or building maintenance services.

(Amended by Ord. 188-15; Ord. 129-17; Ord. 229-17; Ord. 111-21; see Sec. 102 history note.)

Service, Financial. A Retail Sales and Service Use that provides banking services and products to the public, such as banks, savings and loans, and credit unions, when occupying more than 15 feet of linear frontage or 200 square feet of gross floor area. Any applicant for a financial service use shall provide the Planning Department with a true copy of the license issued to it by the State of California.

Service, Fringe Financial. A Retail Sales and Service Use that provides banking services and products to the public and is owned or operated by a "check casher" as defined in California Civil Code Section 1789.31, as amended from time to time, or by a "licensee" as defined in California Financial Code Section 23001(d), as amended from time to time. Any applicant for a fringe financial service use shall provide the Department with a true copy of the license issued to it by the State of California. A Nonprofit Fringe Financial Service shall mean a Fringe Financial Service that is exempted from payment of income tax under Section 23701(d) of the California Revenue and Taxation Code and Section 501(c)(3) of the Internal Revenue Code of the United States. Any such Nonprofit Fringe Financial Service shall provide the Planning Department with a true copy(ies) of its income tax documentation demonstrating its exemption from payment of income tax under State and Federal Law. A new Fringe Financial Service, with the exception of a Nonprofit Fringe Financial Service, shall not locate within one-quarter mile of an existing Fringe Financial Service.

Service, Health. A Retail Sales and Service Use that provides medical and allied health services to the individual by physicians, surgeons, dentists, podiatrists, psychologists, psychiatrists, acupuncturists, chiropractors, Sole Practitioner massage therapists as defined in Section 29.5 of the Health Code, or any other health-care professionals when licensed by a State-sanctioned Board overseeing the provision of medically oriented services. It includes, without limitation, a clinic, primarily providing outpatient care in medical, psychiatric, or other health services, and not part of a Hospital or medical center, as defined by this Section of the Code, and Sole Practitioner Massage Establishments as defined in Section 29.5 of the Health Code, but does not include other Massage Establishments, which are defined elsewhere in this Code. Health Service does not include Reproductive Health Clinic, which is defined separately in this Section 102.

(Amended by Ord. 73-15; Ord. 233-21; Ord. 37-22; Proposition Q, 11/5/2024; see Sec. 102 history note.)

Service, Limited Financial. A Retail Sales and Service Use that provides banking services, when not occupying more than 15 feet of linear frontage or 200 square feet of gross floor area. Automated teller machines, if installed within such a facility or on an exterior wall as a walk-up facility, are included in this category; however, these machines are not subject to the hours of operation, as defined in this Section of the Code and as set forth in the respective zoning district. Any applicant for a limited financial service use shall provide the Planning Department with a true copy of the license issued to it by the State of California.

Service, Motor Vehicle Tow. A Non-Retail Automotive Use that provides vehicle towing service, including accessory vehicle storage, when all tow trucks used and vehicles towed by the use are parked or stored on the premises.

Service, Non-Retail Professional. A Non-Retail Sales and Service Office Use that provides professional services primarily to other businesses including, but not limited to, accounting, legal, consulting, insurance, real estate brokerage, advertising agencies, public relations agencies, computer and data processing services, employment agencies, management consultants and other similar consultants, telephone message services, and travel services. This use may also provide services to the general public but is not required to. This use shall not include research services of an industrial or scientific nature in a commercial or medical laboratory, other than routine medical testing and analysis by a health-care professional or hospital.

(Amended by Ord. 63-20; Ord. 249-23; see Sec. 102 history note.)

Service, Parcel Delivery. A Non-Retail Automotive Use limited to facilities for the unloading, sorting, and reloading of local retail merchandise for deliveries, including but not limited to cannabis and cannabis products, where the operation is conducted entirely within a completely enclosed building, including garage facilities for local delivery trucks, but excluding repair shop facilities. Within PDR Districts, this use is not required to be operated within a completely enclosed building. Parcel Delivery Service for merchandise or products other than cannabis and cannabis products is not allowed as an accessory use to any other principal use.

(Amended by Ord. 229-17; Ord. 47-24; Ord. 54-24; Ord. 113-24; see Sec. 102 history note.)

Service, Personal. A Retail Sales and Services Use that provides grooming services to the individual, including salons, cosmetic services, tattoo parlors, and health spas, bathhouses, and steam rooms. Personal Service does not include Massage Establishment or Gym, which are defined separately in this Section 102.

(Amended by Ord. 285-18; Ord. 111-21; see Sec. 102 history note.)

Service, Retail Professional. A Retail Sales and Service Use that provides primarily to the general public, general business, or professional services including, but not limited to, management, clerical, accounting, legal, consulting, insurance, real estate brokerage, and travel services. It may provide services to the business community, provided that it also provides services to the general public. Otherwise, it shall be considered a Non-Retail Professional Service Use as defined in this Section 102.

This use does not include research service of an industrial or scientific nature in a commercial or medical laboratory, other than routine medical testing and analysis by a health-care professional or hospital.

(Amended by Ord. 285-18; Ord. 63-20; Ord. 249-23; see Sec. 102 history note.)

Shipyard. An Industrial Use that includes the building and repairing of ships.

Single Room Occupancy (SRO) Unit. A Residential Use characteristic, defined as a Dwelling Unit or Group Housing room consisting of no more than one occupied room with a maximum gross floor area of 350 square feet and meeting the Housing Code's minimum floor area standards. The unit may have a bathroom in addition to the occupied room. As a Dwelling Unit, it would have a cooking facility and bathroom. As a group housing room, it would share a kitchen with one or more other single room occupancy unit/s in the same building and may also share a bathroom. A single room occupancy building (or "SRO" building) is one that contains only SRO units and accessory living space.

Small Enterprise Workspace (S.E.W.). An S.E.W. is a use comprised of discrete workspace units of limited size that are independently accessed from building common areas. S.E.W.'s are subject to the controls listed in Section 202.2(g).

Social Service or Philanthropic Facility. An Institutional Community Use that provides programs and/or services of a charitable or public service nature, including but not limited to arts, education, financial or housing assistance, training, and advocacy. In addition to providing their services on site, such uses may also conduct their administrative activities on site as a Principal Use.

(Amended by Proposition H, 11/3/2020; see Sec. 102 history note.)

SOMA. The area bounded by Market Street to the north, The Embarcadero to the east, King Street to the south, and South Van Ness and Division Streets to the west.

Specialty Grocery. See Grocery, Specialty.

Sports Stadium. A Retail Entertainment, Arts and Recreation Use that includes any open-air sports stadium or arena, if conducted on premises not less than 200 feet from any R District.

SRO. Single Room Occupancy.

(Added by Ord. 188-15; see Sec. 102 history note.)

Storage, Commercial. A Non-Retail Sales and Service Use defined as a facility that stores within an enclosed building: contractors' equipment, building materials, or goods or materials used by other businesses at other locations. This use shall not include the storage of waste, salvaged materials, automobiles, inflammable or highly combustible materials, and wholesale goods or commodities.

Storage, Self. A Retail Sales and Service Use defined as a facility that stores, within an enclosed building, household and personal

goods.

Storage, Volatile Materials. An Industrial Use defined as bulk storage of inflammable, highly combustible, or explosive materials.

Storage, Wholesale. A Non-Retail Sales and Service Use defined as a facility that stores, within an enclosed building, wholesale merchandise that is not accessory to a Wholesale Sales use. This use includes cold storage facilities, but not storage of inflammables or hazardous materials, which is covered under Hazardous Materials Storage.

Storage Yard. An Industrial Use involving the storage of building materials or lumber, stones or monuments, livestock feed, or contractors' equipment, if conducted within an area enclosed by a wall or concealing fence not less than six feet high. This use does not include Vehicle Storage or a Hazardous Waste Facility.

Story. That portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above.

Any mezzanine, or intermediate level, shall be considered part of a story constituted by another floor provided it is an open and integral part of the story or room of which it is a portion. There shall be only one such mezzanine per story and it shall have a minimum glazed or unglazed opening of 50 percent on the interior side of the room or story and an area not exceeding one-third of the floor area of the story or room in which it is located. Any mezzanine not meeting these criteria shall be considered a separate story.

(a) ***First Story.*** The highest building story with a floor level that is not more than six feet above grade at the centerline of the frontage of the lot where grade is defined.

(1) ***Grade.*** For purposes of this definition, "grade" is the point of elevation of the finished surface of the ground, paving, or sidewalk at the property line located along primary frontage, i.e., any street frontage between two consecutive streets or alleys where the total street frontage is entirely within an NC District. If the lot has more than one property line or no property line located along primary frontage, the Zoning Administrator shall choose the property line facing a street or alley where the grade is defined. In such situations, the Zoning Administrator shall favor streets that serve as major transportation routes, major or secondary thoroughfares, and streets along which other commercial districts are located. When the property line is five feet or more from the building frontage, grade shall be taken at the surface of the ground, paving, or sidewalk along the building frontage.

(2) Provisions in Section 260 of this Code shall apply in defining the point of measurement at grade, where the building steps laterally in relation to the street used to define grade.

(b) ***Second Story.*** The story above the first story.

(c) ***Third Story and Above.*** The story or stories above the second story and below the ceiling of the topmost story of a building.

(d) ***Basement.*** Space located below the first story of a building when such space is of sufficient floor to ceiling height for legal occupancy.

Street. A right-of-way, 30 feet or more in width, permanently dedicated to common and general use by the public, including any avenue, drive, boulevard, or similar way, but not including any freeway or highway without a general right of access for abutting properties.

Structural Alterations. Any change in the supporting members of a Building, such as bearing walls, columns, beams, or girders.

Structure. Anything constructed or erected that requires fixed location on the ground or attachment to something having fixed location on the ground.

Student Housing. A Residential Use characteristic defined as a living space for students of accredited Post-Secondary Educational Institutions that may take the form of Dwelling Units, Group Housing, or SRO Units and is owned, operated, or otherwise controlled by an accredited Post-Secondary Educational Institution. Unless expressly provided for elsewhere in this Code, the use of Student Housing is permitted where the form of housing is permitted in the underlying Zoning District in which it is located. Student Housing may consist of all or part of a building, and Student Housing owned, operated, or controlled by more than one Post-Secondary Educational Institution may be located in one building.

(Amended by Ord. 63-20; see Sec. 102 history note.)

T

Temporary Cannabis Sales. A Temporary Use that sells or otherwise provides cannabis and cannabis-related products for adult use, and that may also include the sale or provision of cannabis for medicinal use. A Temporary Cannabis Sales Use may only be operated by the holder of a valid Medical Cannabis Dispensary Permit from the Department of Public Health. Any authorization for a Temporary Cannabis Sales Use shall expire on January 1, 2019, pursuant to Section 205.2.

(Added by Ord. 229-17; see Sec. 102 history note.)

Tobacco Paraphernalia Establishment. A Retail Sales and Service Use where more than 10% of the square footage of Occupied Floor Area, as defined in Section 102, or more than 10 linear feet of display area projected to the floor, whichever is less, is dedicated to the sale, distribution, delivery, furnishing, or marketing of Tobacco Paraphernalia from one person to another. For purposes of Sections 249.5, 719, 723, and 744 of this Code, however, Tobacco Paraphernalia Establishments shall mean retail uses where any Tobacco Paraphernalia is sold, distributed, delivered, furnished, or marketed from one person to another. “Tobacco Paraphernalia” means paraphernalia, devices, or instruments that are designed or manufactured for the smoking, ingesting, inhaling, or otherwise introducing into the body of tobacco, products prepared from tobacco, or controlled substances as defined in California Health and Safety Code Sections 11054, *et seq.* “Tobacco Paraphernalia” does not include lighters, matches, cigarette holders, any device used to store or

preserve tobacco, tobacco, cigarettes, cigarette papers, cigars, or any other preparation of tobacco that is permitted by existing law. Cannabis Retail Uses as defined in Section 102, Temporary Cannabis Retail Uses as defined in Section 205.2, and Medical Cannabis Dispensary Uses as defined in Section 102 are not Tobacco Paraphernalia Establishments.

(Amended by Ord. 202-18; Ord. 142-23; Ord. 70-24; see Sec. 102 history note.)

Trade Office. A Non-Retail Sales and Service Use that includes business offices of building, plumbing, electrical, painting, roofing, furnace, or pest control contractors, if no storage of equipment or items for wholesale use are located on site. It may also include incidental accessory storage of office supplies and samples if the storage of equipment and supplies does not occupy more than one-third of the total Gross Floor Area of the use. Such Trade Offices shall operate in a manner to reduce noise, vibration, and emissions impacts beyond the premises of the use. No processing of building materials, such as mixing of concrete or heating of asphalt shall be conducted on the premises. Parking, loading, and unloading of all vehicles used by the contractor shall be located entirely within the building containing the use.

(Amended by Ord. 70-23; see Sec. 102 history note.)

Trade School. An Institutional Education Use, public or private, where industrial arts is the primary course of study. Such use is not required to submit an institutional master plan pursuant to Section 304.5 of this Code.

Trade Shop. A Retail Sales and Service Use that provides custom-crafted goods and/or services for sale directly to the consumer, reserving some storefront space for display and retail service, subject to the conditions in Section 202.2. A trade shop includes, but is not limited to:

(a) Repair of personal apparel, accessories, household goods, appliances, furniture, and similar items, but excluding repair of motor vehicles and structures;

(b) Upholstery services;

(c) Carpentry;

(d) Printing of a minor processing nature, including multi-copy and blueprinting services and printing of pamphlets, brochures, resumes, and small reports, but excluding printing of books, magazines, or newspapers;

(e) Tailoring; and

(f) Other artisan craft uses, including fine arts uses. Arts Activities and Light Manufacturing shall be considered distinct from Trade Shops.

(Amended by Ord. 285-18; Ord. 111-21; see Sec. 102 history note.)

Treasurer. The Treasurer for the City and County of San Francisco.

Truck Terminal. An Industrial Use where trucks meet and transfer goods to each other for shipment to other places.

U

Urban Agriculture. See Agriculture, Urban.

Use. The purpose for which land or a structure, or both, are legally designed, constructed, arranged, or intended, or for which they are legally occupied or maintained, let, or leased.

Use Characteristic. A feature of a Use, related to its physical layout, location, design, access, or other characteristics. Use Characteristics may be regulated independently of a Use itself. Residential Use Characteristics include Single Room Occupancy, Intermediate Length Occupancy, and Student Housing. Commercial Use Characteristics include Drive-up Facility, Formula Retail, Hours of Operation, Maritime Use, Open Air Sales, Outdoor Activity, and Walk-Up Facility.

(Added by Ord. 129-17; amended by Ord. 78-20; see Sec. 102 history note.)

Use Size (Non-Residential). See Non-Residential Use Size.

Utility and Infrastructure. A Use Category that includes Community Recycling Center, Internet Service Exchange, Power Plant, Public Transportation Facility, Public Utilities Yard, Wireless Telecommunications Services (WTS) Facility, and Utility Installation.

(Amended by Ord. 166-16; Ord. 202-18; see Sec. 102 history note.)

Utility Installation. A Utility and Infrastructure Use that includes, but is not necessarily limited to, water, gas, electric, transportation, or communications utilities, or public service facility, provided that operating requirements necessitate placement at this location. This use does not include Wireless Telecommunications Services Facilities, or Public Transportation Facilities, as defined in this Section of the Code.

(Amended by Ord. 166-16; see Sec. 102 history note.)

V

Variance. An authorization to deviate from the strict application of certain Planning Code requirements pursuant to Section 305 of this Code.

(Added by Ord. 129-17; see Sec. 102 history note.)

Vehicle Storage Garage. A Retail Automotive Use that provides for the storage of buses, recreational vehicles, mobile homes, trailers, or boats and/or storage for more than 72 hours of other vehicles in an enclosed structure. It shall not include rooftop storage. A Vehicle

Storage Garage shall comply with the street frontage requirements of the district in which it is located.

Vehicle Storage Lot. A Retail Automotive Use that provides for the storage of buses, recreational vehicles, mobile homes, trailers, or boats and/or storage for more than 72 hours of other vehicles on an open lot. It shall not include rooftop storage. Vehicle Storage Lots shall comply with the Screening and Greening requirements of Section 142.

Vehicular Use Area. An area of a lot not located within any enclosed or partially enclosed structure and that is devoted to a use by or for motor vehicles including parking (accessory or non-accessory); and Automotive Uses that are not enclosed by a structure including, but not limited to, storage of automobiles, trucks or other vehicles; gasoline stations; car washes; motor vehicle repair shops; loading areas; and service areas. Vehicular use areas shall be subject to landscaping and screening requirements of Section 142(b).

W

Waiver Agreement. An agreement acceptable in form and substance to the City Attorney and the Planning Department under which the City agrees to waive all or a portion of the Community Improvements Impact Fee.

Walk-Up Facility. A Use Characteristic defined as a structure designed for provision of pedestrian-oriented services when located on an exterior building wall, including window service, self-service operations, and automated bank teller machines (ATMs). Such facilities shall provide waste receptacles, and be kept free of litter.

(Amended by Ord. 70-23; see Sec. 102 history note.)

Wholesale Sales. A Non-Retail Sales and Service Use that exclusively provides goods or commodities for resale or business use, including accessory storage. This use includes cannabis distribution (any use requiring License Type 11—Distributor, as defined in California Business and Professions Code, Division 10). It shall not include a nonaccessory storage warehouse.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Width of a Street or Alley. Unless specified elsewhere in this Code, the width of a street or alley shall be the distance measured along a line that is perpendicular to the centerline of that street or alley and extends from the mid-point of the front property line of a given parcel to a front property line on the opposite side of that street or alley.

Wireless Telecommunications Services (WTS) Facility. A Utility and Infrastructure Use defined as a facility that sends and/or receives wireless radio frequency (RF) signals, AM/FM, microwave, or electromagnetic waves, for the purpose of providing voice, data, images or other information; including but not limited to digital (previously "cellular") mobile phone service, personal communication service and paging services. WTS Facilities may be located either inside or outside of an enclosed building.

Such facilities include, but are not limited to, directional (panel), omni-directional and parabolic antennas, related electronic equipment, power sources, screening elements, supporting equipment, towers and structures. The term does not include facilities exempt under the Federal Communications Commission's Over The Air Receiving Device rules. A WTS Facility is also referred to as a "Personal Wireless Services Facility," as defined in the Federal Communications Act.

A WTS Facility is subject to the Wireless Telecommunications Services Facility Siting Guidelines ("Guidelines") adopted by the Planning Commission, including but not limited to any design criteria included in those Guidelines.

(Amended by Ord. 166-16; see Sec. 102 history note.)

Wireless Telecommunications Services (WTS) Facility, Macro. A Macro WTS Facility is generally characterized by significant spatial effects and more than two antennas. A WTS Facility is considered a Macro WTS Facility unless determined by the Zoning Administrator to be a Micro WTS Facility.

(Added by Ord. 166-16; see Sec. 102 history note.)

Wireless Telecommunications Services (WTS) Facility, Micro. The Zoning Administrator shall determine whether a proposed WTS Facility is a Micro WTS Facility. A Micro WTS Facility is generally characterized by

(a) limited spatial effects;

(b) a small number of antennas (typically up to two);

(c) an absence of substantial cumulative effects on neighborhood character or aesthetics, when considered in conjunction with other WTS Facilities at the same project site; and

(d) a location that is not "disfavored" as specified in the Guidelines.

(Added by Ord. 166-16; see Sec. 102 history note.)

Wireless Telecommunications Services Facility, Temporary. A Wireless Telecommunications Services Facility located on a parcel of land and consisting of a vehicle-mounted facility, a building-mounted antenna, or a similar facility, and associated equipment, that is used to provide temporary coverage for a large-scale event or an emergency, or to provide temporary replacement coverage due to the removal of a permitted, permanent WTS facility necessitated by the demolition or major alteration of a nearby property.

(Added by Ord. 166-16; see Sec. 102 history note.)

X, Y, Z

None.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 69-87, App. 3/13/87; Ord. 131-87, App. 4/24/87; Ord. 32-91, App. 1/25/91; Ord. 63-91, App. 2/27/91; Ord. 14-15 , File No. 141210, App. 2/13/2015, Eff. 3/15/2015; Ord. 22-15, File No. 141253, App. 2/20/2015, Eff. 3/22/2015; Ord. 52-15 , File No. 141266, App. 4/30/2015, Eff. 5/30/2015; Ord. 73-

15, File No. 141303, App. 5/28/2015, Eff. 6/27/2015; Ord. 161-15, File No. 150804, App. 9/18/2015, Eff. 10/18/2015; Ord. 162-15 , File No. 150805, App. 9/18/2015, Eff. 10/18/2015; Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015; Ord. 162-16 , File No. 160657, App. 8/4/2016, Eff. 9/3/2016; Ord. 166-16 , File No. 160477, App. 8/11/2016, Eff. 9/10/2016; Ord. 217-16, File No. 160424, App. 11/10/2016, Eff. 12/10/2016; Ord. 34-17, File No. 160925, App. 2/17/2017, Eff. 3/19/2017; Ord. 95-17, File No. 170125, App. 5/12/2017, Eff. 6/11/2017; Ord. 99-17, File No. 170206, App. 5/19/2017, Eff. 6/18/2017; Ord. 129-17, File No. 170203, App. 6/30/2017, Eff. 7/30/2017; Ord. 229-17, File No. 171041, App. 12/6/2017, Eff. 1/5/2018; Ord. 13-18, File No. 171096, App. 2/9/2018, Eff. 3/12/2018; Ord. 195-18, File No. 180268, App. 8/10/2018, Eff. 9/10/2018; Ord. 202-18, File No. 180557, App. 8/10/2018, Eff. 9/10/2018; Ord. 285-18, File No. 180806, App. 12/7/2018, Eff. 1/7/2019; Ord. 296-18, File No. 180184, App. 12/12/2018, Eff. 1/12/2019; Ord. 7-19, File No. 180917, App. 1/25/2019, Eff. 2/25/2019; Ord. 15-19, File No. 181046, App. 2/8/2019, Eff. 3/11/2019; Ord. 116-19, File No. 181156, App. 6/28/2019, Eff. 7/29/2019; Ord. 182-19, File No. 190248, App. 8/9/2019, Eff. 9/9/2019; Ord. 205-19, File No. 181211, App. 9/11/2019, Eff. 10/12/2019; Ord. 206-19, File No. 190048, App. 9/13/2019, Eff. 10/14/2019; Ord. 208-19, File No. 190594, App. 9/20/2019, Eff. 10/21/2019; Ord. 63-20, File No. 200077, App. 4/24/2020, Eff. 5/25/2020; Ord. 78-20, File No. 191075, App. 5/22/2020, Eff. 6/22/2020; Proposition H, 11/3/2020, Eff. 12/18/2020; Ord. 111-21, File No. 210285, App. 8/4/2021, Eff. 9/4/2021; Ord. 209-21, File No. 210808, App. 11/19/2021, Eff. 12/20/2021; Ord. 217-21, File No. 210807, App. 12/10/2021, Eff. 1/10/2022; Ord. 233-21, File No. 210381, App. 12/22/2021, Eff. 1/22/2022; Ord. 37-22, File No. 211263, App. 3/14/2022, Eff. 4/14/2022; Ord. 50-22, File No. 211299, App. 3/31/2022, Eff. 5/1/2022; Ord. 75-22, File No. 220264, App. 5/13/2022, Eff. 6/13/2022; Ord. 190-22, File No. 220036, App. 9/16/2022, Eff. 10/17/2022; Ord. 264-22, File No. 220811, App. 12/22/2022, Eff. 1/22/2023; Ord. 53-23, File No. 210585, App. 4/21/2023, Eff. 5/22/2023; Ord. 70-23, File No. 220340, App. 5/3/2023, Eff. 6/3/2023; Ord. 122-23, File No. 230371, App. 7/5/2023, Eff. 8/5/2023; Ord. 142-23, File No. 230410, App. 7/26/2023, Eff. 8/26/2023; Ord. 159-23, File No. 230732, App. 7/28/2023, Eff. 8/28/2023; Ord. 248-23, File No. 230446, App. 12/14/2023, Eff. 1/14/2024; Ord. 249-23, File No. 230701, App. 12/14/2023, Eff. 1/14/2024; Ord. 2-24, File No. 230704, App. 1/19/2024, Eff. 2/19/2024; Ord. 47-24, File No. 231223, App. 3/15/2024, Eff. 4/15/2024; Ord. 54-24, File No. 240169, App. 3/22/2024, Eff. 4/22/2024, Retro. 3/30/2024; Ord. 62-24, File No. 230310, App. 3/28/2024, Eff. 4/28/2024; Ord. 70-24, File No. 231225, App. 4/5/2024, Eff. 5/6/2024; Ord. 113-24, File No. 240193, App. 6/13/2024, Eff. 7/14/2024, Retro. 3/30/2024; Ord. 297-24, File No. 241055, App. 12/19/2024, Eff. 1/19/2025; Proposition O, 11/5/2024, Eff. 12/20/2024)

AMENDMENT HISTORY

Section amended in its entirety; Ord. 22-15, Eff. 3/22/2015 (for the legislative history of prior definition provisions, see the Editor's Note below). See individual definitions for subsequent amendment history notes.

CODIFICATION NOTES

1. So in Proposition H, 11/3/2020.
2. So in Ord. 75-22.
3. So in Ord. 50-22.

Editor's Note:

As part of its substantial amendments to this Code, Ord. 22-15 *consolidated the Art. 1 definitions into a single section, Sec.102 above. Previously, Art. 1 definitions had been codified under separate section numbers. For the purpose of retaining the legislative history of the now superseded Art. 1 definition provisions, the terms formerly defined in this Article are set out below, along with their history notes as they existed immediately prior to the effectiveness of Ord.* 22-15.

SEC. 102.1. ALLEY.

(Amended by Ord. 443-78, App. 10/6/78)

SEC. 102.2. ARTS ACTIVITIES AND SPACES.

(Added by Ord. 412-88, App. 9/10/88; Ord. 36-08, File No. 080157, App. 3/17/2008)

SEC. 102.3. BUILDING.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.4. COURT.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.5. DISTRICT.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 69-87, App. 3/13/87; Ord. 131-87, App. 4/24/87; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90; Ord. 217-05, File No. 050865, App. 8/19/2005; Ord. 72-08, File No. 071157, App. 4/3/2008; Ord. 298-08, File No. 081153, App. 12/19/2008; Ord. 61-09, File No. 090181, App. 4/17/2009; Ord. 90-11, File No. 110301, App. 6/9/2011, Eff. 7/9/2011; Ord. 98-11, File No. 110229, App. 6/15/2011, Eff. 7/15/2011; Ord. 196-11, File No. 110786, App. 10/4/2011, Eff. 11/3/2011; Ord. 176-12, File No. 120472, App. 8/7/2012, Eff. 9/6/2012; Ord. 182-12, File No. 120665, App. 8/8/2012, Eff. 9/7/2012; Ord. 56-13, File No. 130062, App. 3/28/2013, Eff. 4/27/2013)

SEC. 102.6. DWELLING.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.6.1. DWELLING SPECIFICALLY DESIGNED FOR AND OCCUPIED BY SENIOR CITIZENS.

(Added by Ord. 130-10, File No. 090906, App. 6/24/2010 ; amended by Ord. 62-13, File No. 121162, App. 4/10/2013, Eff. 5/10/2013)

SEC. 102.7. DWELLING UNIT.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 218-14, File No. 140381, App. 10/27/2014, Eff. 11/26/2014, Oper. 2/1/2015)

SEC. 102.8. FAMILY.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.9. FLOOR AREA, GROSS.

(Amended Ord. 414-85, App. 9/17/85; Ord. 537-88, App. 12/16/88; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90; Ord. 275-03, File No. 021577, App. 12/10/2003; Ord. 129-06, File No, 060372, App. 6/22/2006; Ord. 298-08, File No. 081153, App. 12/19/2008; Ord. 173-12, File No. 120471, App. 8/2/2012, Eff. 9/1/2012 ; Ord. 182-12, File No. 120665, App. 8/8/2012, Eff. 9/7/2012; Ord. 232-14, File No. 120881, App. 11/26/2014, Eff. 12/26/2014)

SEC. 102.10. FLOOR AREA, OCCUPIED.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.11. FLOOR AREA RATIO.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88 ; Ord. 182-12, File No. 120665, App. 8/8/2012, Eff. 9/7/2012)

SEC. 102.12. HEIGHT (OF A BUILDING OR STRUCTURE).

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.13. LIVE/WORK UNIT.

(Added by Ord. 412-88, App. 9/10/88; amended by Ord. 56-02, File No. 012127, App. 4/29/2002; Ord. 218-14, File No. 140381, App. 10/27/2014, Eff. 11/26/2014, Oper. 2/1/2015)

SEC. 102.14. LOT.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 15-98, App. 1/16/98)

SEC. 102.15. LOT, CORNER.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.16. LOT, INTERIOR.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.17. NIGHTTIME ENTERTAINMENT USES.

(Added by Ord. 115-90, App. 4/6/90; amended by Ord. 172-11, File No. 110506, App. 9/12/2011, Eff. 10/12/2011)

SEC. 102.18. ONE OWNERSHIP.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.19. OPEN SPACE, REQUIRED.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.20. OPEN USE.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.21. PLAN DIMENSIONS.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.22. PRINCIPAL FACADES.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.23. STORY.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.24. STORY, GROUND.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.25. STREET.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.26. STRUCTURE.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.27. STRUCTURAL ALTERATIONS.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.28. USE.

(Added Ord. 414-85, App. 9/17/85; amended by Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.29. BEDROOM.

(Added by Ord. 298-08, File No. 081153, App. 12/19/2008)

SEC. 102.30. WIDTH, STREET OR ALLEY.

(Added by Ord. 298-08, File No. 081153, App. 12/19/2008)

SEC. 102.31. VEHICULAR USE AREAS.

(Added by Ord. 84-10, File No. 091453, App. 4/22/2010)

SEC. 102.32. ORNAMENTAL FENCING.

(Added by Ord. 84-10, File No. 091453, App. 4/22/2010)

SEC. 102.33. PERMEABLE SURFACES.

(Added by Ord. 84-10, File No. 091453, App. 4/22/2010)

SEC. 102.34. MOBILE FOOD FACILITY.

(Added by Ord. 297-10, File No. 101351, App. 12/3/2010)

SEC. 102.35. URBAN AGRICULTURE.

(Added by Ord. 66-11, File No. 101537, App. 4/20/2011, Eff. 5/20/2011)

SEC. 102.36. STUDENT HOUSING.

(Added by Ord. 188-12, File No. 111374, App. 9/11/2012, Eff. 10/11/2012)

SEC. 102.37. COTTAGE FOOD OPERATION.

(Added by Ord. 288-13, File No. 130998, App. 12/26/2013, Eff. 1/25/2014)

EXHIBIT 3

Introduction
to the San Francisco General Plan

Land Acknowledgement:

The City and County of San Francisco acknowledges that we are on the unceded ancestral homeland of the Ramaytush Ohlone, who are the original inhabitants of the San Francisco Peninsula. As the indigenous stewards of this land and in accordance with their traditions, the Ramaytush Ohlone have never ceded, lost, nor forgotten their responsibilities as the caretakers of this place, as well as for all peoples who reside in their traditional territory. As guests, we recognize that we benefit from living and working on their traditional homeland. We wish to pay our respects by acknowledging the Ancestors, Elders, and Relatives of the Ramaytush Ohlone community and by affirming their sovereign rights as First Peoples.

Introduction

San Francisco is a place of singular beauty, combining an exquisite natural setting with a unique human-made urban landscape. Human settlement of San Francisco originated with the Ramaytush Ohlone people, who maintained three semi-sedentary villages on the peninsula. The Spanish colonists built on or near those lands when they established the Presidio and the Mission, resulting in the eventual displacement, subjugation, and cultural erasure of these communities. Since then, the City has grown with a density that is unusual on the West Coast. Where other cities flatten their hills or wind streets around them, here the rush to develop created a defiant street grid that accentuates the inclines and introduces dramatic vistas across the bay and deep into the cosmopolitan center. San Francisco's lively and varied pattern of neighborhoods, commercial centers, and parks has nurtured a remarkable diversity of communities. It has been not only a hub for the Bay Area but a global center of economic energy, technological innovation, and influential political, social, and cultural movements.

Amid this beloved setting lies the inherent, often hidden fragility, including vulnerability to natural disasters and to the mounting consequences of anthropogenic climate change. The city has also been shaped by a history of injustices including segregation, urban renewal, and the inequitable distribution of environmental benefits and burdens. The City's human scale is justly celebrated for its charm and livability – but the City continues to struggle with housing affordability.

Purpose

The San Francisco General Plan is the embodiment of the City's vision for the future, serving to guide evolution and growth over time. It provides a comprehensive set of goals, objectives and policies that influence how people live, work, and move about, as well as the quality and spirit of the City. Periodic updates via a public adoption process ensure that this document remains freshly relevant. The General Plan governs actions by all arms of San Francisco's government. It is implemented by the city's direction of public resources and guidance of private development.

State law and San Francisco's Charter require a comprehensive, long-term general plan for the physical development of the city. The San Francisco General Plan ensures that there is adequate infrastructure to support residential, commercial, recreational and institutional land uses and facilities, and that neighborhoods are walkable and connected by a robust transportation system geared toward public transit, walking, and biking. Economic growth should position San Francisco for a resilient future sustainably linked to and coordinated with regional development.

The General Plan attempts to navigate complex imperatives between preserving cherished qualities and assets, tackling needed changes, and preparing for both known and unpredictable challenges and crises. In 2020, as the COVID-19 pandemic and the killing of George Floyd highlighted inequalities, the Planning Commission passed Resolution Number 20738 to center the Planning Department's work program and resource allocation on racial and social equity. This mandate has been incorporated into the General Plan. In doing so, the City and County of San Francisco acknowledges and apologizes for the history of inequitable planning policies and actions that have resulted in racial disparities. San Francisco must take reparative actions and build accountability in collaboration with American Indian communities, Black communities, communities of color, and other historically marginalized and disenfranchised communities.

Process and Vision

The General Plan's goals, objectives and policies have been developed with extensive community engagement. These robust conversations and public hearings are designed to distill a shared vision for the City's future.

In this shared vision, San Francisco strives to be...

> *...a just city, committed to racial and social equity, starting with recognizing and seeking to rectify past injustices.*
>
> *…an inclusive city, where all can find a home and community as well a nurturing environment for creativity and self-expression.*
>
> *...a safe, livable and environmentally sustainable city, where all are able to live healthy lives and access thriving natural systems, restorative parks, and a high-quality built environment. The climate crisis requires urgent local, regional, and global action.*
>
> *...an economically vital city, where all are able to prosper. Economic vitality is possible only where stable, meaningful livelihoods are protected, entrepreneurial dynamism is fostered within an ecosystem that can withstand geopolitical turbulence and financial volatility, and everyone can access ladders to opportunity.*
>
> *...a city that recognizes that achieving justice, inclusivity, safety, livability, environmental sustainability and economic vitality requires accountable government, regional cooperation, transparent processes, and incorporation of diverse communities into all aspects of decision making.*

Structure

The General Plan consists of a series of Elements and Area Plans.

Each Element addresses a topic and generally applies citywide, while Area Plans relate these topics comprehensively to specific parts of the city in a greater level of detail. Several of the Elements correspond to topics that state law requires the General Plan to address, including Air Quality, Community Facilities, Environmental Protection, Housing, Recreation and Open Space, Safety and Resilience, and Transportation. San Francisco has also chosen to address additional topics through Elements including Arts, Commerce and Industry, and Urban Design. Policies related to land use are located throughout the General Plan and are cross-referenced in a Land Use Index.

Environmental Justice policies required by the State have been integrated throughout the General Plan. The Environmental Justice Framework, hereby incorporated into the General Plan by reference, sets out key policy priorities and strategies which will be integrated into elements, area plans, and supporting documents to improve public health and other outcomes in Environmental Justice Communities, which are primarily communities of color and lower-income communities that face higher pollution levels and other health risks.

Area Plans of the San Francisco General Plan include:

- Balboa Park Station
- Bayview Hunters Point
- Candlestick Point *Subarea*
- Central SoMa (South of Market)
- Central Waterfront
- Chinatown
- Civic Center
- Downtown
- East SoMa (South of Market)
- Executive Park *Subarea*
- Glen Park
- Hunters Point Shipyard
- Market and Octavia
- Mission
- Northeastern Waterfront
- Rincon Hill
- Showplace Square/Potrero
- Transit Center District *Subarea*
- Treasure Island/Yerba Buena Island
- Van Ness Avenue
- Western Shoreline
- Western SoMa (South of Market)

Amended by the Board of Supervisors Ordinance No. 0084-23 on 05/09/2023.
Amended by Resolution No.14149 adopted on 06/27/1996.

San Francisco Planning Department
sfplanning.org

Questions or comments on the General Plan? Please email us at pic@sfgov.org.

EXHIBIT 4

Recreation and Open Space Element

INTRODUCTION

With its dramatic physical setting comprised of hilltops and mountains, surrounded by the bay and ocean, with nature woven through the landscape, San Francisco has an intrinsic connection with its environment. The opportunity the City provides to move outside and connect with nature has drawn countless thousands here over time, and that draw continues today.

As our City grows, we must not lose sight of these very qualities. If San Francisco is to continue to offer its residents, visitors, and workers a vibrant, civic, livable environment connected with the wonders of the natural world, we need a framework that ensures a world-class open space system. The goal of the City's Recreation and Open Space Element is to continue the City's legacy of fine parks and recreational opportunities, and guide the City's future decisions so they improve that open space system for the benefit of everyone.

Why Is Recreation and Open Space Important?

Recreation and open space are critical components of any community's quality of life; for San Franciscans they are defining elements of the City itself. The City's open space system provides places for recreation, activity and engagement, for peace and enjoyment, and for freedom and relief from the built world. It serves the social and environmental health of the City, providing a sustainable environment. Among its benefits:

- **Open space and recreation activities improve resident's physical and mental health.** Open spaces and recreational facilities offer a wide range of health related benefits. They provide an opportunity for residents and visitors to exercise, give residents access to sunshine, nature and fresh air, and even encourage people to walk or bike from place to place. They can have a significant impact on people's stress levels and overall mental health, particularly in urban areas like San Francisco, and can be proven to be actual preventative measures that impact positively on health care and health care costs. Physical recreation reduces obesity and risk of cardiovascular disease, diabetes and other health ailments. Public open spaces, whether playgrounds, picnic fields or even just engaging streets, can help build community by giving neighbors a realm in which to get to know each other, and giving children a safe place to play.

- **Open space promotes environmental sustainability.** Natural habitat provides sanctuary for wildlife species ranging from mammals, birds and insects to plants; trees and other types of vegetation provided in open space networks can reduce air pollution; and wetlands can filter contaminants. The trails and streets of an open space network can also aid in reducing greenhouse gases, by providing alternative transportation routes and promoting bicycling and walking.

- **Open space and recreation activities can help to address environmental justice across a community.** Public recreation provides accessible and low cost opportunities to all San Franciscans, regardless of income level. High rates of childhood obesity and illness often correspond to fewer acres of usable open space. Provision of open space in areas with high concentrations of density, poverty, youth or seniors can redress equity issues. A clear example is how local food production increases access to fresh local produce and provides an opportunity for communities to connect with nature.

- **Open space provides tangible economic benefit.** Numerous studies have quantified the dollars that parks and tree plantings bring back to a city, by making the area more attractive for investment, by attracting and expanding local businesses, by increasing tourism and by enhancing property values. The Trust for Public Lands' study, The Economic Benefits of Parks & Open Space, cited testimony that our own Golden Gate Park has been shown to increase the value of nearby property to the tune of $5-$10 million additional dollars annually.

How Are We Doing in Providing Recreation and Open Space?

By any measure, San Francisco is performing well against its urban counterparts. San Francisco has well over 3,400 acres of recreation and open space owned and managed by the Recreation and Park Department (RPD). It also contains over 250 acres of open space owned and managed by the State of California, and another 1600 acres of federally-owned open space. These publicly-owned open spaces make up almost 20% of the City's total land area. The quantity of usable open space increases even more when one includes the other spaces owned by city agencies, college campuses, schoolyards open during non-school hours, urban plazas or other publicly accessible outdoor spaces throughout the City, by another 560 acres. This puts San Francisco among the top five cities in the country in terms of parkland per resident. All of these open spaces are shown in *Map 1: Existing Open Space*.

MAP 1 - Existing Open Space

The 2004 Recreation Assessment was the culmination of a nine-month planning effort and process to evaluate the recreation needs of residents and to ensure the future direction of recreation within the SFRPD. The assessment pieced together critical issues, challenges and opportunities. It was the first such report developed solely for recreation in SFRPD's history. The Recreation Assessment identified where the SFRPD should focus its energies and resources as it applies to the Recreation Division, continuing the legacy of high quality recreation facilities and program services for the citizens of San Francisco. SFRPD should regularly assess its recreation component as required in the Charter. See *Map 2* for a map of existing Recreation Facilities.

MAP 2 - Existing Recreation Facilities

San Francisco values its recreation and open spaces. In 1974, San Francisco voters passed Proposition J, which directs a percentage of property taxes towards the City's Open Space Fund, to acquire new parks and open space. We spend more than any other urban area per resident on our parks, according to a 2008 report by the Trust for Public Lands, at an average of almost $200 per resident. But more revenue is needed as land costs increase and as we move to meet the challenges of providing space and recreation opportunities for a growing population.

How Do We Define Recreation and Open Space?

Recreation and open space are critical components of any city, and by necessity have to come in different forms and experiences. Open space provides the 'breathing room' in a dense urban environment and promotes opportunities to engage in outdoor activities, access nature, enjoy scenic views, and experience our City's many ecosystems. Recreation includes activities that happen within open space both at outdoor or indoor facilities, the key elements being that the activity is beneficial by way of being fun, stimulating, refreshing, or relaxing in some form, either physical, mental, or the combination of the two. Active recreation involves physical activity while passive recreation usually involves sitting or lying down. Active recreation refers to a mix of uses in a neighborhood park that includes the following facilities types: athletic fields, buildings or structures for recreational activities, concessions, community gardens, courses or sport courts, children's play areas, dog play areas, or bike paths. A passive recreation area refers to a mix of uses in a park, undeveloped land or minimally improved lands which can include the following: landscaped areas, natural areas, ornamental gardens, non-landscaped greenspaces, stairways, decorative fountains, picnic areas, and water bodies without recreational staffing.

San Francisco's definition of recreation and open space system includes a variety of types of spaces, including traditional spaces and facilities for recreation such as:

- **Recreation Centers:** The City operates 25 multi-use recreation centers, providing playground and sports opportunities, as well as programming for youth, adults and seniors.
- **Playgrounds:** Children's playgrounds including play structures for toddler and older children.
- **Playing fields:** Including baseball courts, soccer fields, basketball and tennis courts, as well as children's and toddlers' playgrounds.
- **Unprogrammed or Unstructured Open areas:** Grassy, landscaped, or even paved open areas provide opportunities for unstructured time away from the dense urban environment.
- **Trails and Natural Areas:** Including 1,100 acres of natural lands, protecting the plant and animal habitats of these unique landscapes for residents and visitors to enjoy, trail systems, and other planted green areas.
- **Cultural Arts and Recreation Centers:** The Recreation and Parks Department offers a variety of classes, community event spaces, and cultural activities such as: art camps, dance and theater classes, programs on music and poetry for all ages.
- **Sports and Athletics:** The City's robust system of sports programs and facilities includes several citywide sports facilities, such as Kezar Complex in Golden Gate Park and Crocker Amazon Park Playground Sports Facility.

The recreation and open space system also includes spaces that supplement traditional parks in the City such as:

Community Gardens: Opportunities for residents to grow produce and flowers in their neighborhoods.

- **Living Streets, and alleys, plazas or parklets:** These are components of the public right-of-way that have been improved to provide a gathering space and enhance the pedestrian experience.

- **Privately-owned Public Open Spaces (POPOS):** Spaces owned by private development that are accessible to the public. POPOS come in a variety of forms including plazas, rooftop terraces, Greenhouse, and sun terraces, and include landscaping and public seating for the enjoyment of the public usually in dense neighborhoods.

- **Piers and wharves:** These are waterfront open spaces that provide shoreline access along the Bay edge. The Port provides public access along the perimeter of many of its piers as well as on individual public Piers such as Pier 7 and 14 as well as others.

Lastly, the system also includes spaces unique to San Francisco, such as such as Coit Tower, Union Square, Stern Grove, Palace of Fine Arts, and lesser known amenities like Camp Mather that offers outdoor camping experiences.

Guiding Principles for Open Space and Recreation

San Francisco provides a significant amount of open space already for its residents, particularly given its small land area, its hilly topography, and its density, all of which challenge open space development. But we can do better, particularly in the better utilization, maintenance and design of our open spaces. The policies of the General Plan are intended to improve these aspects of our recreation and open space system. A holistic recreation and open space system encompasses the full range of spaces within our definition of open space, as well as the necessary experiences that are integral to San Francisco's unique identity. The Recreation and Open Space Element follows these guiding principles to ensure such holistic system:

1. INTEGRATED & MULTIFUNCTIONAL. A major theme developed from the outreach process was the concept of "making the most of what we have": utilizing and improving the expansive recreation and open space system the City already provides. An integrated and multi-functional open space network would respond to a variety of needs for recreation and open space, better utilizing the existing resources. Such needs range from refreshing from daily pressures of life to exercising and active sports, from appreciating the beauty of nature to maintaining natural habitats and wildlife, and from enjoying play time for kids and adults to housing civic and cultural events.

2. SENSE OF PLACE. San Francisco is a regional epicenter for ecological, economic, and cultural diversity. Open spaces should aim to build on our City's intrinsic qualities, both natural and cultural, and to reflect the values we place on cultural diversity and biodiversity. Furthermore, they should create a network that inspires a deep connection to place.

3. EQUITY & ACCESSIBILITY. Open space and recreational programs should be equitably distributed. They should provide access for all residents, workers and visitors, and work towards a democratic network that includes all neighborhoods.

4. CONNECTIVITY. San Francisco's network of open spaces should be wholly connected. The open space system should facilitate non-motorized movement, link diverse neighborhoods, be easy to navigate and understand and, where feasible, enhance habitat through connectivity.

5. HEALTH & SAFETY. Open space should increase the City's capacity to be a safe and healthy place to live. Its design should promote social interaction, wellness, and a healthy lifestyle by providing opportunities for physical, cultural and social activities, and a connection to nature.

6. ECOLOGICAL FUNCTION & INTEGRITY. With environmental sustainability as a driving theme, the quantity and quality of natural systems in the City should be preserved and expanded, by promoting aquatic and terrestrial biodiversity, by designing for watershed health, and by implementing environmental, ecological and conservation-minded strategies.

7. SUSTAINING STEWARDSHIP. San Francisco's community members should be actively engaged as participants in its future. Policies should work towards shared, continued stewardship that increases the tangible link between community members and their open space network. Partnerships between public agencies, private business, and community based non-profits, and individual members of the community to foster pride, purpose and community should continue to be developed.

Related Plans and Agency Programs

The Recreation and Open Space Element, along with its related components that make up the City's overall Open Space Framework, aims to provide the elements needed to strive towards San Francisco's goal of a comprehensive open space network: a broad vision, a policy context, and a tangible task list for moving forward. The City also maintains several policy documents, plans and programs that provide direction about specific open space and recreational components, or to certain parts of the City. These include:

Street Park Program

Street Parks is a partnership between San Francisco Parks Alliance and the San Francisco Department of Public Works (DPW) to support the development and maintenance of community-managed open spaces on DPW owned properties, such as streets, stairways, sidewalks, median strips, traffic circles, and vacant lots. Improvements can range from sidewalk landscaping to median plantings to creation of mini-parks in unpaved street right-of-ways and in traffic circles. The program provides technical support on how to accomplish such projects, organizing seminars to assist in building a budget, and can provide matching funds.

Better Streets/Public Realm Planning

The City's Better Streets Plan, adopted in 2010, states that the City's rights-of-way should be "attractive, safe and useable public open space corridors with generous landscaping, lighting and greenery", providers of habitat for urban wildlife, and that they should invite multiple uses, including recreation. The Better Streets Plan provides a set of standards, guidelines, and implementation strategies to govern how the City designs, builds, and maintains its pedestrian environment. A number of public realm planning efforts implementing the principles of the Better Streets Plan are underway.

Community and Area Plans

A number of neighborhood-based planning efforts have been completed or are underway throughout the City. Each neighborhood plan seeks to increase the livability of several of San Francisco's urban neighborhoods by tapping the benefits of growth as a way to build more balanced neighborhoods. Most include capital improvement plans that draw from and build upon the policies of this Element to address a range of neighborhood needs including recreation, open space, and an improved public realm.

Waterfront Plan

The Port of San Francisco's Waterfront Plan (originally referred to as the Waterfront Land Use Plan) was initially adopted by the Port Commission in 1997, with an updated version adopted in 2023, defining acceptable uses, policies and land use information applicable to all properties under the Commission's jurisdiction. The Waterfront Plan defines locations for new public-private partnership projects coordinated with major public open space, park and recreation areas, maritime, and historic preservation improvements along the waterfront.

Office of Community Investment and Infrastructure, (Former Redevelopment Agency), Open Space Planning

The Office of Community Investment and Infrastructure, which is the successor agency to the Redevelopment Agency, created a significant amount of open space in its project areas, with more in the planning stages. New parks have been developed at Golden Gateway, in the Western Addition, Yerba Buena Center, Bayview Hunter's Point, Rincon Point - South Beach, Mission Bay, and Transbay. These spaces are currently being managed by the Office of Community Investment and Infrastructure and a number of different city agencies.

Golden Gate National Recreation Area (GGNRA) Planning Efforts

The GGNRA encompasses a number of open space and parklands throughout Marin, San Mateo and San Francisco, including Alcatraz Island, Crissy Field, the Presidio and the majority of the City's public beaches. A major planning process was completed by the SPUR for Ocean Beach to examine ways to manage coastal processes that drive erosion, ensure the future of critical infrastructure, protect natural resources, and activate and enhance the beach to best serve the local and regional populations.

Significant Natural Resource Area Management Plan

The San Francisco Recreation and Parks Department (SFRPD) has developed a Significant Natural Resource Areas Management Plan (SNRAMP) to address the restoration and management of the remaining elements of San Francisco's original ecosystem. The SNRAMP is implemented by the Natural Areas Program, a division in the Recreation and Park Department, and its goal is to restore and enhance remnant natural areas of the City, while also developing and supporting community-based stewardship of these areas. The program also includes a number of volunteer opportunities to engage students, businesses, groups, and individuals in the stewardship of San Francisco's natural lands.

Association of Bay Area Governments Bay Trail Plan and Bay Area Water Trail Plan

The Bay Trail Plan, adopted in 1989, includes a nine-county , 400 mile regional hiking and bicycling trail around the perimeter of San Francisco and San Pablo Bays. The Plan was prepared by the Association of Bay Area Governments pursuant to Senate Bill 100, which mandated that the Bay Trail:

- Provide connections to existing park and recreation facilities,
- Create links to existing and proposed transportation facilities; and,
- Avoid adverse effects on environmentally sensitive areas.

The San Francisco Bay Area Water Plan, adopted in 2005, was developed to create a network of launch and landing sites, or "trail heads". Such network would allow people in human-powered boats and beachable sail craft to enjoy the historic, scenic and environmental richness of San Francisco Bay through continuous, multiple-day and single-day trips on the Bay. The trail will promote safe and responsible use of the Bay, while protecting and increasing appreciation of its environmental resources through education and coordinated, and strategic access to the Bay.

San Francisco Blue Greenway Planning and Design Guidelines

The Blue Greenway Planning and Design Guidelines (draft released in 2011) catalog the open space network along San Francisco's Southeastern Waterfront, identify future open space opportunities; designate roadway designs for streets that link the open spaces, and prioritize improvements between neighborhood connections to the waterfront system of open spaces. In addition, it establishes design guidelines for signage and site furnishings along the entire length, identifies funding for Port projects and outlines a process for continued interagency coordination.

The Climate Action Plan (CAP)

The 2021 San Francisco Climate Action Plan sets forth a set of actionable and measurable strategies that not only charts a pathway to achieve net-zero greenhouse gas (GHG) emissions, but also works toward addressing racial and social equity, public health, economic recovery, resilience, and the provision of safe and affordable housing to all. Integral to these strategies is improving San Francisco's parks, natural open spaces, and rights-of-way. The Plan includes several strategies addressing Healthy Ecosystems, including: restore and enhance parks, natural lands, and open spaces; maximize trees throughout the public realm; and increase greening and integration of local biodiversity into the built environment. The CAP provides specific targets and milestone, calls for ongoing monitoring to ensure critical measurement of progress, and allows for adjustments based on changing conditions.

San Francisco Recreation and Parks Department Project Standards and Design Guidelines

The Project Standards and Design Guidelines were created to ensure a well maintained and actively used park system that supports the long-term health of people, plants, and animals. Recognizing that management practices have impacts beyond park boundaries, SFRPD developed the Standards and Guidelines to adapt to and preserve local systems through sustainable design of open spaces and facilities, and maintenance procedures. These practices include the use of proven sustainable materials and technologies.

OBJECTIVES AND POLICIES

OBJECTIVE 1

ENSURE A WELL-MAINTAINED, HIGHLY UTILIZED, AND INTEGRATED OPEN SPACE SYSTEM

The City's goal is to make the very most of the open space assets that San Francisco's robust system already provides. Well-maintained, highly utilized, and integrated open spaces are hallmarks of a unified and connected open space system with diverse programming, numerous amenities, and regular maintenance. Offering a diverse range of active and passive recreational opportunities in the City's current recreation and open spaces would help better utilize existing resources and encourage access for diverse users and activities.

POLICY 1.1

Encourage the dynamic and flexible use of existing open spaces and promote a variety of recreation and open space uses, where appropriate.

San Francisco has a variety of high-quality open spaces, where diverse types of users can engage in a myriad of activities—children can play, seniors can linger on benches and socialize, people can exercise and enjoy nature, and families can gather for a picnic. San Francisco's open spaces vary in their form and function: from smaller local green streets, pocket parks, plazas, and community gardens; to neighborhood parks, playgrounds, sports fields, and recreation centers; to large regional-serving parks such as Golden Gate Park and special destinations such as Camp Mather. To ensure vibrant parks and open spaces the City should deploy a diverse range of opportunities, including the following options:

- Provide recreational opportunities, both active and passive, that respond to user demographics and emerging recreational needs.
- Include innovative community-driven uses such as food production, education, and improved streetscaping.
- Design open spaces that include both active programming and passive uses in tranquil spaces.
- Provide programming for healthy and active lifestyles.
- Add user amenities such as concessions that cater to and attract visitors.
- Expand opportunities for temporary uses such as festivals, art, performances, and farmers markets.
- Allow active engagement with natural areas through public access trails, wildlife observation, birding, and educational displays and programs.
- Increase cultural programming and activities based on neighborhood need and interest.
- Provide spaces and structures that

Some of the City's open spaces and recreational facilities are underutilized and need additional programming and activation to address community interests and needs. These underutilized spaces offer a tremendous opportunity because the space is already owned and operated by the City. Such locations would in most cases require minimal renovation to take full advantage of the space. These open spaces and recreational facilities should be redesigned or re-programmed to better serve the needs of the surrounding neighborhood,

while ensuring a flexible design to adapt to changing neighborhood needs over time. Some types of public spaces that have traditionally been overlooked can offer additional opportunities for innovative and community-driven strategies for activation – wide sidewalks and traffic medians can be considered for community gardens, and parking lots and other spaces can support temporary festivals and farmers markets. There also are events large and small, such as fairs, concerts, and sporting events, that occur annually or on a recurring basis in parks and open spaces throughout the City. These events are often well-attended and enjoyed by many residents and visitors. In some cases the draw of these events provides the first exposure for many people to the City's diverse parks and open spaces. The City should continue to evaluate how these events impact the open space itself and on the surrounding neighborhoods.

POLICY 1.2
Prioritize renovation in highly-utilized open spaces and recreational facilities and in high needs areas.

Many of the City's open space and recreational facilities support a high intensity of uses. These spaces clearly provide a welcome respite for residents and visitors, but they are often so heavily utilized that more frequent maintenance is necessary to keep up with their heavy usage. The City should perform user studies and collect usage data to assess which of the existing recreation and open spaces are the most highly used so that those spaces may be targeted for renovation and improvement. Renovation of resources also should be prioritized in "high needs areas," defined as areas with high population densities, high concentrations of seniors and youth, and lower income populations, that are located outside of existing park service areas(See *Map 7: High Needs Areas: Priority Renovation & Acquisition Areas* and Policy 2.1).

POLICY 1.3
Preserve existing open space by restricting its conversion to other uses and limiting encroachment from other uses, assuring no loss of quantity or quality of open space.

The shortage of vacant sites and the intensity of development in San Francisco produce pressures on the City's public open spaces, sometimes putting spaces at risk of conversion to uses not serving the public purpose of respite and recreation. These same factors generate considerable public demand for access to open spaces. It is essential that the City protect its public open spaces from conversion to other uses, which threatens the overall integrity of the open space network.

Outdoor space in parks and playgrounds should not be diminished except in very unique cases. Yet, despite general agreement on the need to preserve public open space, developments may indeed be proposed on public land designated as open space. It is anticipated that the most persuasive arguments in favor of development will be based on the "public value" of the proposed development. The public value will differ among proposals, and a determination of this projected value as compared the potential open space benefit will be difficult and must be subject to rigorous public scrutiny. In order to assist in this determination when proposals for new development occur, the following provisions should be applied:

1. Proposals for Non-recreational Uses on Recreation and Park Department Land:

Decisions related to non-recreational uses on RPD land shall conform to the San Francisco Charter Section 4.113. The Charter requires a vote of the electors for park property to be sold or leased for non-recreational purposes or to build any structure for non-recreational purposes on park property. The Charter also notes that the Recreation and Parks Commission, with the approval of the Board of Supervisors, may use subsurface space for parking or other uses that would not be detrimental to the original park purpose.

2. Proposals for Permanent New or Expanded Recreational and Cultural Buildings, and Supporting Facilities on Recreation and Park Department Land:

A properly balanced recreation system combines both indoor and outdoor spaces and programs. Indoor recreational facilities are as important as outdoor space in a well-integrated park system. New indoor recreation facilities may be necessary to respond to local community needs, changing demographics of many San Francisco neighborhoods, and shifting maintenance requirements. Additionally, amenities that serve users of recreational facilities and open spaces – such as bicycle rental stands, cafes, and kiosks – can help provide services that enable and attract more people to visit and use underutilized open spaces and spend more time there. Culture is also an important aspect of community recreation; cultural facilities such as libraries or community spaces can support and enhance the existing park system. Proposals for such facilities or uses should be carefully evaluated to ensure the proposed location is optimal and appropriate. Decision-making bodies should consider the following criteria in making their determinations on such proposals:

- Facility directly serves and improves the existing open space by supporting better utilization of space while continuing to provide public access and respond to the needs of the local community.
- Facility is limited in size. The size will vary by open space, but the size shall be limited to the smallest footprint appropriate and feasible for the proposed use, taking into account the intensity of use, expected participants and spectators, as well as other relevant factors.
- Facility incurs limited impacts on the existing open space (because of a preponderance of nearby outdoor open space or other factor), or the projected public benefits outweigh the impacts.
- A clear rationale exists for siting the facility, articulating the advantages of the proposed site compared to reasonable alternatives.

Aloss of open space resulting from approval of the proposed facility generally should be offset with replacement open space of equal or higher quality. This new open space can be provided through a variety of ways, such as the removal of existing non-utilized structures, the acquisition of new space, or rearrangement of existing recreational and open space uses to better integrate these uses and the proposed facility. Maintenance facilities, restrooms, and other park-supporting facilities owned and operated by the Recreation and Park Department that are necessary for the maintenance of parks are exempt from these requirements.

3. New and Expanded Facilities in Non-RPD Open Spaces:

Many of the City's current and potential open space sites are under the jurisdiction of public agencies other than the Recreation and Park Department ("RPD") - including the Port of San Francisco (the Port), the SFPUC, the Office of Community Investment & Infrastructure, and the Department of Public Works. These spaces include parkland, shoreline access, reservoirs, grounds of public institutions, streets, alleys, and undeveloped street rights-of-way, and are shown in *Map 3: Existing and Proposed Open Space*. In some cases, these non-RPD-owned sites are intended for public uses other than recreation and the site's role as open space is secondary to the primary use. Yet their role as open space is important, as they supplement playgrounds and parks and are a major visual asset.

New facilities related to that primary use, or expansions of various types of supporting facilities may be requested. These proposed facilities may be necessary to perform the public function of the particular land-owning agency. Decision-making bodies should analyze all of the following criteria in making their determinations on such proposals:

- Facility is necessary to provide the public service or operations of the agency holding the site in question.
- A clear rationale exists for siting the facility, articulating the advantages of the proposed site compared to reasonable alternatives.
- Facility incurs limited impacts on the existing open space (because of a preponderance of nearby outdoor open space or other factor), or the projected benefits outweigh the impacts.

Upon approval, the city may request the sponsoring agency to meet certain design criteria and performance standards that ensure conformity with the General Plan.

MAP 3 - Existing and Proposed Open Space

Removing non-recreational uses

In keeping with the overall policy goal of limiting encroachments, the City should also pursue eliminating non-recreational uses in its public open spaces. In the past, parks and playgrounds have been used as sites for public facilities such as fire and police stations, sewer plants and schools. Undoubtedly, the public need for them was great at the time of their construction and many are still essential. But as non-recreational facilities such as these require maintenance, the City is faced with the decision to renovate them or to relocate them altogether.

Where it is possible to provide services elsewhere, the City should demolish the facility so as to return the site to open space use. If the facility can be successfully converted to recreational use, then reuse could be an alternative to demolition. The City should not, however, permit the reuse of such facilities for other non-recreational purposes. The same policy should apply to the reuse of obsolete recreational facilities.

Temporary Structures

Temporary structures are often needed for different events, and in the case of natural disasters, our parks serve as temporary evacuation space. Therefore, all temporary structures (i.e. all structures that do not have in-ground footing attached to the structure) in compliance with the City's permit process are exempt from the above requirements. Use of such structures beyond their original intent, however, would be subject to the criteria explained earlier in this policy.

POLICY 1.4
Maintain and repair recreational facilities and open spaces to modern maintenance standards.

Maintaining open spaces and recreational facilities at a high level of quality will help ensure that they are well-utilized and enjoyed. In order to maintain this goal, the City should continue to employ well-trained staff, such as gardeners, arborists, electricians, plumbers and other tradespeople to maintain our open space system and recreational facilities.

However, maintaining the City's existing recreation and open space system in a good condition continues to be a challenge due to intensive use, facility age, and a high number of sites. The City has diminishing resources devoted to general maintenance and upkeep. The city, especially for private and supplemental spaces, should continue to explore creative partnerships to meet maintenance goals of parks and open spaces, including those within the jurisdiction of other agencies, such as the Port or National Park Service. Where feasible and in keeping with the City's goal of providing well-maintained spaces the City should continue to seek alternative maintenance

methods, such as working with non-profit stewards, or developing alternative maintenance agreements. Similarly, where open space is maintained by entities other than the City, such as the National Park Service, the City should advocate for ongoing maintenance of such facilities, particularly when such facilities fall into disrepair and become unusable.

The Recreation and Parks Department owns a significant portion of the City's open space system. With over 220 parks and 3000 acres of parkland, RPD requires significant resources to keep the system in good to excellent condition. However, even as RPD continues to seek additional funding sources to address these needs, maintenance continues to be a problem due to rising costs and limitations on staffing and equipment.

RPD now evaluates parks on a quarterly basis and in addition the City Controller's Office provides an annual report on the state of the City's parks. Further, RPD uses a facility lifecycle management database to prioritize the RPD's deferred maintenance needs. The reports have helped direct RPD management and City resources to address maintenance needs. The City should continue to analyze maintenance needs by using these reports and other sources as data from users throughout the recreation and open space system to ensure the maintenance standards are met and funding is adequate.

POLICY 1.5
Prioritize the better utilization of McLaren Park, Ocean Beach, the Southeastern Waterfront and other underutilized significant open spaces.

Some of the City's large signature spaces offer a special opportunity to provide multifunctional open spaces that serve a diverse set of users. In particular:

McLaren Park

McLaren Park is a citywide resource due to its large size, varied landscape, and the specialized activities and programs located within the park. At the same time, it is located in an area of the City with one of the highest concentration of children, youth, seniors, and low-income households. McLaren Park should offer uses which satisfy the recreation needs of adjacent neighborhoods as well as meeting the needs of the city. The McLaren Park Master Plan was originally written in 1983, updated in 1996, and most recently updated with recommendations in the 2010 McLaren Park Needs Assessment and published the McLaren Park Vision Plan in 2018. The City should ensure that the objectives and priorities of the Master Plan provide effective guidance for the needs of the park today.

Development of the park should capitalize on the site's natural conditions, including topography, existing native vegetation, and views, in compliance with RPD guidelines. New plantings should be added to provide habitats and windbreaks, to define sub-areas of the park, and to provide colorful and attractive visual accents. Plant species should be hardy, wind- and fire-resistant, and provide for and enhance wildlife habitats.

In an effort to increase park use, the City should continue promoting events that attract visitors to the Park. For example, Jerry Garcia Day, an annual festival held in honor of the local musician, draws thousands of visitors to the park. Revenues generated from such events could fund maintenance of and improvements to recreation facilities and open space.

The City should consider a number of improvements to McLaren Park. Existing traffic conditions should be examined to reduce conflicts between vehicles and park users. The City should investigate the feasibility of improving the existing right of way in the park to allow for safe pedestrian, vehicular and bike access where appropriate and converting those areas to recreational use. The existing trail system should be retained and improved by completing missing linkages. Any new development should build on the existing infrastructure including roads and parking areas, the irrigation system and drainage structures, and lighting and electrical installations. Infrastructure that is damaged should be replaced within the existing network, channel or path. New recreation areas should serve active, as well as passive, non-organized recreation needs, that respond to a wide spectrum of park users.

Ocean Beach

Ocean Beach offers a vast, unbroken expanse of natural open space that is one of the longest urban beaches in the country. The area historically served the growing San Francisco population with the Sutro Baths, the Cliff House, the Fleishhaker Pool, and an amusement park, but now suffers from erosion and a lack of amenities. At the same time, Ocean Beach is annually visited by as many as three million people for activities such as walking, picnicking, sunbathing, jogging, dog walking, surfing, fishing, and simply enjoying the natural beauty.

Ocean Beach faces significant obstacles to fulfilling its potential as a great public space at the city's edge. First, critical components of the wastewater infrastructure are located near the beach, with some elements that are threatened by erosion. Coastal management to protect infrastructure, ecological resources, and public access is a complex challenge. The erosion is likely to worsen as climate-related sea level rise accelerates. In addition, Ocean Beach is administered by a host of Federal, State, and Local agencies, including the National Park Service[1], the SF Recreation and Park Department, the San Francisco Public Utilities Commission, and the State Coastal Commission.

A non-binding Master Plan for Ocean Beach has been developed by a project team led by San Francisco Planning and Urban Research (SPUR) and incorporating input from an interagency Steering Committee, Planning Advisory Committee (PAC), Technical Advisors and the general public. The plan addresses the complex challenges faced at the coastline, including severe erosion, jurisdictional issues, a

diverse array of beach users and points of view, and the looming challenge of climate-induced sea level rise. It presents recommendations for the coastline and how it should be managed and protected for the stretch from the Cliff House to Fort Funston, spanning roadway changes, bike and pedestrian connectivity, technical interventions, and ecological restoration.

To help address the issues described above, the SFPUC, in partnership with other agencies, is implementing the Ocean Beach Climate Change Adaptation Project for the southernmost portion of the beach and surroundings. The Adaptation Project builds upon several previous efforts including the Coastal Protection Measures and Management Strategy for South Ocean Beach (2015) and the Ocean Beach Open Space Landscape Design (2017). Project elements include, but are not limited to, managed retreat, structural protection, access and recreation improvements, and beach nourishment.

1. Most of the beach is GGNRA property.

Southeastern Waterfront/The Blue Greenway

The Blue Greenway is a project to improve and expand the public open space network along the City's central and southern waterfront from China Basin Channel to the San Francisco County Line. Collectively, the Blue Greenway is intended to provide opportunities for much-needed open space that is easily accessible for exercise and recreation, including bicycle and pedestrian access, recreational uses in the water, (e.g. kayaking), access to historical resources, and enjoyment of art as well as waterfront public access from nearby neighborhoods. The plan realizes objectives set forth in the Association of Bay Area Government's (ABAG) Bay Trail Plan and the Bay Area Water Trail Plan. High priority should be given to the project's completion as it will provide a much-needed open space system that is easily accessible for exercise, recreation and enjoyment of art and open space in the City's southern and central corridor. (See *Map 8: Blue Greenway* and Policy 2.4)

POLICY 1.6
Support the continued improvement of Golden Gate Park while preserving the beauty of its landscape.

Golden Gate Park is San Francisco's largest and one of its most important parks, with over 1,000 acres of open space and an estimated number of users topping 13 million annually. The park offers immeasurable opportunities to meet the needs of neighborhood, citywide and regional residents, and visitors from national and international destinations. The landscape design and natural legacy of Golden Gate Park are some of the many features that draw people to this park, and they would benefit from additional investment in restoration efforts. Many recently renovated and new facilities in the park, including the Conservatory of Flowers, the DeYoung museum, and the new California Academy of Sciences, have made the park increasingly popular. After ten years of community input, the City completed a 1998 Master Plan, a comprehensive plan that laid out landscaping, circulation, recreation facilities, buildings and monuments, utilities and infrastructure, maintenance, as well as funding for this signature open space. This Master Plan provides guidelines for continued improvements.

1. **Assess the Master Plan:** Many of the proposals in the Plan have been completed, while some remain unfinished. Golden Gate Park is one of the City's most important resources and a detailed assessment of the Master Plan should be completed to determine if the goals for the Master Plan have been implemented. In the long-term, the City should work with the community to determine if this Master Plan should be updated.

2. **Improve pedestrian access to Golden Gate Park:** Current pedestrian access around and to Golden Gate Park is highly limited, with sidewalks entirely lacking along one side of Lincoln Avenue, and limited formal pedestrian access points into the park. The City should consider a long-term goal of improving pedestrian access into the park and along its edges and discouraging entering the park on improvised trail entrances, which harms the flora in the Park. In response to the Master Plan's recommendation for a comprehensive signage system, signage standards were developed and many new signs have been added to the Park.

3. **Discourage automobile traffic:** The increasing popularity of the Park has also brought an increase in users. The City should continue to pursue alternative transportation to and within the park and examine both incentives for alternative transportation and disincentives for automobile traffic. The City should study potential options for improving the pedestrian experience, including considering roadway improvements and redesign(such as the cross-park tunnel that is incorporated in the Doyle Drive project at the Presidio) to improve safety and enhance views.

POLICY 1.7
Support public art as an essential component of open space design.

Art plays a critical role in both activating spaces and indicating to passersby that the space is public. The public requirement for art, originally passed in 1969, established the importance of monumental art integrated within public projects. This ordinance, currently titled the Art for Enrichment program, requires two percent of the construction cost of civic projects, including buildings, transportation projects, and new parks to be spent on public art for civic projects.[2] In 1985, the Downtown Plan required certain private projects to spend one percent of the project's worth on the provision of public art. This requirement was expanded to other areas the city in a new Ordinance in 2012.[3] In order to promote art in public and open spaces, the City should continue to evaluate the possibility of expanding

this requirement to other areas in the City. These projects vary greatly in their style and substance, from murals to monuments, but they have in common the ability for the public to access them. When parks or open spaces are renovated or new spaces are built, public art should be placed where it's both visible and appropriate given the parkland or open space.

2. For additional detail, See San Francisco Administrative Code, Section 3.19.

3. For additional detail, See San Francisco Planning Code, Section 4.29.

POLICY 1.8
Support urban agriculture and local food security through development of policies and programs that encourage food production throughout San Francisco.

The benefits of urban agriculture include increased access to healthy fresh food, a closer connection between residents and their food system, and opportunities for community-building and beautification. The growing movement to increase urban agriculture should be supported on both public land and on private spaces where possible. Currently, a huge and unmet demand for more community garden space exists in the City. Urban gardens should be permitted and promoted in public open spaces. To promote this goal, the Mayor's 2009 Executive Directive on Healthy and Sustainable Food encourages food production within the City and requires departments to identify public land for food production. City practices should support the work of organizations promoting urban agriculture, and explore ways to increase their access in new housing developments, existing publicly managed housing developments, and other public lands. The City should continue to make it a priority to find additional public spaces to meet this need. The City's Administrative Code also calls for comprehensive programs, policies, and strategies to generally enhance and increase urban agriculture uses. The City should also incentivize creation of community agriculture on private sites, such as private yards and building rooftops. Activities that allow distribution of locally grown food, such as farmers markets, Community-Supported Agriculture (CSA) distribution sites, or even direct sales of local and large-scale urban agriculture, should be considered a valuable part of activating underutilized public and private open spaces.

POLICY 1.9
Preserve sunlight in public open spaces.

Solar access to public open space should be protected. In San Francisco, presence of the sun's warming rays is essential to enjoying open space. Climatic factors, including ambient temperature, humidity, and wind, generally combine to create a comfortable climate only when direct sunlight is present. Therefore, the shadows created by new development nearby can critically diminish the utility and comfort of the open space.

Shadows are particularly a problem in downtown districts and in neighborhoods immediately adjacent to the downtown core, where there is a limited amount of open space, where there is pressure for new development, and where zoning controls allow tall buildings. But the problem potentially exists wherever tall buildings near open space are permitted.

Properties under the jurisdiction of the Recreation and Park Department or designated for acquisition are protected by a voter-approved Planning Code amendment. It restricts the construction of any structure exceeding forty feet in height that would cast a shadow that is adverse to the use of the park from between one hour after sunrise to one hour before sunset, unless it is determined that the impact on the use of the space would be insignificant. In determining whether a new shadow cast by a development is adverse to the use of a particular property, the City considers several quantitative and qualitative criteria, including the size of the park property, the amount of existing shadow, and the timing, size, location, and duration of the new shadow and the public good served by the building.

The City should support more specific protections elsewhere to maintain sunlight in these spaces during the hours of their most intensive use while balancing this with the need for new development to accommodate a growing population in the City.

POLICY 1.10
Ensure that open space is safe and secure for the City's entire population.

Safety and security in the City's open spaces is essential to allow San Franciscans to enjoy their community open spaces. Improving the design of an open space through design treatments can reduce the fear of crime and the actual level of crime. Design treatments can include:

- Providing clear sightlines, where appropriate.
- Designing the street/open space interface to encourage permeability and access.
- Ensuring adequate and appropriate lighting.
- Better utilizing parks and open space to increase park visitors and encourage "eyes on the park."

POLICY 1.11
Encourage private recreational facilities on private land that provide a community benefit, particularly to low and moderate-income residents.

Outdoor space is not the only medium for physical activity. San Franciscans use indoor recreation spaces for activities like swimming, tennis, basketball, ping-pong, yoga, and general fitness and group classes. Private recreational sources, such as clubs and gyms, offer residents spaces to participate in such activities. In permitting new development, San Francisco should continue to encourage space for physical activity, including private recreational facilities in building projects to supplement those provided by the City.

Some private and non-profit recreational facilities act in a quasi-public manner. These may provide free or low-cost community access, supplementing existing City programs in underserved communities for active education, sports and recreational activities. Examples include the YMCA, Boys and Girls Clubs, and other community-based organizations. These types of facilities should be supported when they serve San Francisco residents, and, if removed, the loss of recreational space they provide should be considered.

For-profit recreational facilities can offer similar educational and recreational benefits, provided the participant can pay. Examples include country and tennis clubs, yoga studios, and private gyms. These facilities should receive support, based on the level at which they can demonstrate they are meeting underserved low and moderate income need. Such facilities should be encouraged to offer neighborhood discount or “community class” rates to improve access for community members that are not able to afford full rates. The City should also look for opportunities to partner with such private organizations, to provide benefits to the public at a lower cost.

POLICY 1.12
Preserve historic and culturally significant landscapes, sites, structures, buildings and objects.

Historic resources are an important element of our park system. The value of these resources should be preserved and celebrated because they provide an important link to the significant events, people, places or design that they represent.

POLICY 1.13
Preserve and protect character-defining features of historic resources in City parks, when it is necessary to make alterations to accommodate new needs or uses.

The City should identify, evaluate, and preserve historic and cultural resources in City parks. Prior to any project that involves the alteration or replacement of any of these resources, the City should conduct a comprehensive survey and analysis to identify resources and associated character-defining features within the vicinity of the proposed project. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize the resource should generally be avoided. The replacement of historic and cultural resources and features should be avoided if possible.

OBJECTIVE 2

INCREASE RECREATION AND OPEN SPACE TO MEET THE LONG-TERM NEEDS OF THE CITY AND BAY REGION

In an urban area, the most critical factor in the provision of open space is its distribution. All types of open space activity - from sports fields to playgrounds - should be accessible to and within walking distance of every resident of the City. Walking distance, however, ranges depending on the type of activity and the resident. A half mile is commonly accepted as a distance that can be comfortably walked in 10 minutes, and as a distance most people are willing to walk to access community uses.[4] For most recreational activities, including active ones such as hiking, biking and sports activities; or for passive ones, like picnicking, this walking distance is acceptable. However, for activities that involve small children, such as a playground, one-quarter mile (a five minute walk) is more appropriate. Using these walking distances, and taking into account topography and other barriers, the City’s open space is generally well distributed, as illustrated in *Map 4: Walkability*.

4. Regional Plan Association (1997) Building Transit-Friendly Communities A Design and Development Strategy

MAP 4 - Walkability

However, some parts of the City are still deficient in certain types of open space. The eastern side of the City has a lack of large open spaces. While certain areas are planned and zoned for Production, Distribution, and repair (PDR) uses and for maritime industries, other areas were recently rezoned to support additional residential development. The future population increase in these areas and throughout the City (See *Map 6: Areas of Potential Additional Population Growth, 2040*) will exacerbate current open space deficiencies.

Many parts of the City also lack playground space. Sports fields are well-distributed; however, capacity is limited and the demand for their use is often greater than what can be provided in neighborhood spaces.

Even in neighborhoods that have open spaces within walking distance, higher density and lower income populations may mean demand in these areas exceeds the capacity of local open spaces. As these communities continue to grow, open space improvements and acquisition are needed to maintain access to this limited resource. This objective, and the policies that follow, are aimed at addressing these deficiencies through new or improved open space provision.

POLICY 2.1
Prioritize acquisition of open space in high needs areas.

Throughout the country, safe, green open spaces are in short supply in dense communities, where low-income and minority populations tend to be concentrated, as well as large numbers of children and seniors. In the more densely populated, older areas of San Francisco, people often have less mobility and fewer financial resources to seek recreation outside of their neighborhood. People in less dense parts of the City may enjoy use of private yards and patios, while residents in denser neighborhoods may not have that option. Finally, studies have found that the need for a park as a restorative "oasis" is most critical in dense urban areas.

Priority for acquisition of new space to address open space inequities should be given to high need areas, defined as places where there is low access to open space (illustrated in *Map 4: Walkability*),a conglomeration of high density, high percentages of children, youth, seniors, and low income households (illustrated in *Map 5: Population Density, Household Income, Concentration of Children and Youth, Concentration of Seniors*), and in which the most growth is projected to occur between now and 2040 (illustrated in *Map 6: Areas of Potential Additional Population Growth, 2040*).[5] Future areas with adopted master plans or Redevelopment plans, such as Mission Bay, Park Merced, Hunters Point Shipyard/ Candlestick, and Treasure Island (See *Map 4D: Walkability: Proposed Open Spaces in Large Plan Areas*) have identified site specific open spaces and recreational facilities, along with funding and implementation strategies for those parks and recreation facilities. These proposed site-specific parks and open spaces would support the planned population growth and therefore these proposed parks are incorporated into the analysis as existing park spaces. Layering all of these factors results in *Map 7: High Needs Areas: Priority Acquisition & Renovation Areas*. This map and analysis should be updated periodically using updated decennial US Census data.

5. The Planning Department Land Use Allocation distributes projected housing and employment growth as determined by the Association of Bay Area Governments to 981 Traffic Analysis Zones (TAZ). These zones vary in size, from a block around downtown to several blocks in more outlying areas. The allocation of TAZ-specific growth is based on the current development pipeline (development projects under construction, approved or under review) and an estimate of additional development potential for each TAZ.

MAP 5 - Population Density, Household Income, Concentration of Children and Youth, Concentration of Seniors

MAP 6 - Areas of Potential Additional Population Growth (2040)

MAP 7 - High Needs Areas: Priority Acquisition & Renovation Areas

Recreation and Parks Department maintains an Acquisition Policy, as required by the City Charter (Section 16.107) and the Park Code (Section 13.02), aimed at facilitating acquisition of open space in high needs areas. The Acquisition Policy provides guidance to promote equitable recreational and open space opportunities through several criteria: location in High Needs Areas, available funding sources that may be leveraged, inter-jurisdictional cooperation, and community support. In order to maintain new acquisitions, the policy also acknowledges the need to identify and leverage resources for continued maintenance and operational support.

New acquisitions should continue to consider the composition of current and projected neighborhood populations. There are both demographic and cultural differences in how people use parks: preschoolers, school age children, teenagers, adults, and senior citizens have distinct open space needs that should be accommodated, that may also vary according to social and economic groups. Design of new spaces should rely on the specific needs and values of its user communities, by using a participatory community design process.

While open space acquisition should not be limited by the City's inability to maintain additional parkland, the City should recognize that acquisition will require an on-going commitment of additional resources for maintenance. In appropriate cases, the City should acquire the property and develop low cost maintenance techniques and programs for open space that are not used for intensive recreation, or should hold the land vacant until development and maintenance funds are available.

POLICY 2.2
Provide and promote a balanced recreation system which offers a variety of high quality recreational opportunities for all San Franciscans.

The City's goal is to ensure that all San Franciscans are within a reasonable walk from an open space with a range of active and passive recreational opportunities. To ensure the highest quality of recreational opportunities for its residents, the City must be able to respond to changing demographics, neighborhood demand, and emerging recreational trends as it plans for new or expanded recreation and open space. The recreation system should provide an equitable distribution of facilities and services and consistent hours of operation. It should also provide sufficient opportunities for populations who are frequent users of open space, such as seniors and children.

POLICY 2.3
Provide recreational programs that are responsive to community needs and changing demographics.

In 2010, SFRPD implemented a new recreation system that focuses on flexibility and responsiveness to changes within communities by providing appropriate programming based on community interest and demand. To stay up-to-date with current needs and interests, RPD routinely surveys their recreation program users. The results provide RPD with information to ensure that programs and services meet the existing needs of neighborhood residents and are on the cutting edge of emerging trends.

RPD also works with the Department of Children, Youth, and Their Families (DCYF) on their Community Needs Assessment, conducted every two years. RPD participates in the assessment as a service provider, and relies on this report to update its recreation programming in coordination with other surveys and assessments. RPD and the City should continue to provide innovative recreational programs that respond to changing community needs.

POLICY 2.4
Support the development of signature public open spaces along the shoreline.

The Pacific Ocean, San Francisco Bay, and their respective shorelines are important natural resources in San Francisco. They offer opportunities for water-oriented recreation, passive recreation, views, and habitat. Most of the property adjacent to the thirty-two mile shoreline is in under public ownership. Maintaining public access to the waterfront is integral to San Francisco's identity and creating continuous open spaces along the ocean and bay is one of the City's long-term goals. Much of the waterfront is already accessible to the public, through parks ranging from Fort Funston, Ocean Beach, the Presidio and Fort Mason to the urban waterfront of the Embarcadero, and numerous open spaces along the Piers to Candlestick Point State Recreation Area.

These open space opportunities should be enhanced and expanded by focusing on the development of several signature open spaces that draw people from their immediate neighborhoods and beyond. Key focus opportunities for developing new or enhanced signature open spaces on the waterfront are listed below by geographic area, and are identified in *Map 8: Blue Greenway*. Additionally, connecting these open spaces to the surrounding neighborhoods and throughout the City and region is an important goal and is discussed further in Policy 3.2.

MAP 8 - Blue Greenway

Northeastern Shoreline

Significant progress has been made in opening and improving the city's northern shorelines. With the opening of Crissy Field in the Golden Gate National Recreation Area and the retention of much of the open space in the Presidio as publicly-accessible open space, this area has transformed itself into a regional destination. Long-term, maximizing the recreational opportunities of other shoreline areas should be considered and inter-governmental and other partnerships should be pursued to further develop these opportunities. At the same time, existing facilities should be maintained at a level good repair to assure their ongoing usefulness.

In addition, a major opportunity exists to create an expanded, multi-park open space at the juncture of Market Street and The Embarcadero. The existing open spaces of Embarcadero Promenade, Justin Herman Plaza, and Sue Bierman (formerly Ferry) Park provide a wealth of untapped opportunity, which can be connected to function as a coherent link from downtown to the Ferry Building and the waterfront, holding several linked yet distinct activity and recreation spaces. Additionally, the Port has opened the Northeast Wharf at Pier 27, which includes a three acre plaza in front of a new Cruise Terminal at the base of Telegraph Hill, and a series of linked open spaces in the heart of Fisherman's Wharf.

Western Shoreline

The western shoreline has the advantage that it is already a long-stretch of natural and publicly-accessible open space. Ocean Beach is a national treasure and should be improved to acknowledge the significance of vast, unbroken expanse of beach in the City.

A non-binding Ocean Beach Master Plan has been developed by SPUR (a San Francisco non-profit supporting planning and good government in the Bay Area) in close coordination with responsible agencies. The Plan includes recommendations to improve and restore conditions at Ocean Beach by adapting proactively to the changing coastline. The western shoreline also connects to Lake Merced, providing opportunities for enhanced access to the waterfront and recreational opportunities. The SFPUC is undertaking several efforts, including implementing the Ocean Beach Climate Change Adaptation Project, to improve access to the watershed lands in this area. If additional space becomes available, this space should provide improved connections from the neighborhood to the waterfront.

Southeastern Waterfront

The continued development of Mission Bay, the passage of the Eastern Neighborhoods plans (Mission, East SoMa, Showplace Square/Potrero Hill, and Central Waterfront Area Plans), the approved developments at Mission Rock, Pier 70, the Potrero Power Station, India Basin, and the proposed Candlestick Point and Hunters Point Shipyard developments will bring growth, which will require increased access and open spaces throughout the Southeast. Most of these plans are accompanied by specific open space strategies for parkland along the waterfront, where active water-oriented uses such as shoreline fishing, swimming, and boating should be promoted. The 2018 Central Waterfront: Dogpatch Public Realm Plan includes additional, more specific recommendations for the Central Waterfront-Dogpatch Public Realm Plan area.

BLUE GREENWAY

The Blue Greenway is a project to improve and expand the public open space network along the City's central and southern waterfront, from the China Basin Channel to the San Francisco County Line (see *Map 8: Blue Greenway*). It provides a new vision of how parks and public spaces can be created to complement and connect with existing open spaces in this industrial mixed-use area along the Bay waterfront. The Blue Greenway seeks to both provide opportunities for much-needed open space that is easily accessible for exercise and recreation, including bicycle and pedestrian access, recreational uses in the water (e.g. kayaking and swimming), access to historical resources, and enjoyment of art, as well as improve waterfront public access from nearby neighborhoods. These goals realize objectives set forth in the Association of Bay Area Governments (ABAG) San Francisco Bay Trail Plan and Bay Area Water Trail for southeast San Francisco.

The following Blue Greenway projects should be given high priority as the neighborhoods along the Bay waterfront – which are already deficient in open space – continue to grow in population. These projects correspond with identified high needs areas. Some are longer-term, large-scale projects that will require public funding:

- **China Basin Shoreline Park:** This existing approximately two-acre park will be expanded as a part of the development of the Port's Sea Wall Lot 337 project and will be the northern gateway of the Blue Greenway.
- **Mission Bay Park System:** This 41-acre park system will include a large scale, bayfront park between the China Basin Shoreline Park and Pier 70, with an important Blue Greenway segment. These open space opportunities and projects are incorporated into the Office of Community Investment and Infrastructure's Mission Bay Redevelopment project.
- **Crane Cove Park:** This approximately seven-acre shoreline park within the Port's Pier 70 development area include construction of an aquatic center and interpretive educational information regarding the City's deeply rooted maritime history. In addition to Crane Cove Park, the Pier 70 site presents opportunities for a variety of other open spaces, all of which must be consistent with the industrial maritime character and setting of the site.
- **Pier 70 Development Project:** The waterfront development site is approximately 28 acres, which includes approximately nine acres of open space, including approximately four acres of open spaces along the waterfront that will incorporate historic shipbuilding infrastructure.
- **Potrero Power Station Development Project:** This approximately 23-acre parcel is the former site of the Potrero Power Plant, which is now planned for a major multi-phase mixed use development that will include significant amount of residential, office, laboratory, and other supportive uses. A major feature of the development is its 6.9 acres of waterfront and inland open space that will be coordinated with the adjacent Pier 70 multi-phase mixed-use development, as it provides an opportunity to extend waterfront access through the pier to Warm Water Cove.
- **Warm Water Cove:** This isolated park has the opportunity to be improved and expanded by up to three acres to provide access to the City's Eastern shoreline and to provide recreational opportunities to the growing population. The 2018 Central Waterfront-Dogpatch Public Realm Plan includes concept designs for this site to guide future expansion and enhancements.
- **Islais Creek Improvements:** This project may consist of shoreline improvements, including rebuilding dilapidated wharves, removing ghost piles, and providing for open space system linkages to expand public access and recreational water use of Islais Creek. In August 2021, the City and the Port published the Islais Creek Southeast Mobility Adaptation Strategy (ICSMAS), which examined the Creek and its surrounding neighborhood's flood hazard risks and identified a comprehensive suite of possible adaptation pathways to protect the area and its key public assets from flooding and permanent inundation.
- **India Basin:** The recently closed Hunters Point Power Plant and adjacent shoreline properties offers the opportunity to bring much-needed recreational space to the center of the City's southeast neighborhoods, helping address the health and environmental impacts of the plant's operations. Relatedly, RPD in embarking on a major redesign and enlargement of the India Basin Shoreline Park and India Basin Open Space that will, among other aspects, expand the area of the parks by incorporating new property at 900 Innes Avenue. The proposed India Basin multi-phase development, approved in 2018, will also contribute significant new open space area. Taken together, the new and improved open spaces from the Power Plant Site through India Basin and into the Shipyard are expected to create a network of diverse open spaces for the Bayview community and the City at large.

- **The former Hunters Point Shipyard, Candlestick Park and Candlestick State Recreation Area:** These areas form the southern terminus of the Blue Greenway. These open space opportunities and projects are incorporated into the Office of Community Investment and Infrastructure's Candlestick and Hunters Point Shipyard redevelopment project.

The City, including the SFRPD, the Port of San Francisco, and Office of Community Investment and Infrastructure, should continue ongoing planning efforts to improve connections and address any gaps amongst the various waterfront open spaces to create a linked system of parks that is consistent with the Blue Greenway planning efforts. In addition to signature open spaces, the City should consider new waterfront open space improvements that serve a non-recreational purpose, including climate change adaptive infrastructure. Current projections by the Pacific Institute predict that global warming may cause the ocean to rise as much as five and a half feet along California's coastline in the next 100 years, impacting many areas of the San Francisco Bay, including the shoreline areas, much of Mission Bay and adjacent portions of SoMa. Inclusion and restoration of open space, particularly tidal wetlands, can act as a natural buffer and play a key role in adapting to sea level rise. Wetlands can protect shorelines from storm surges while assisting in reducing carbon levels through sequestration, so wetland restoration and habitat enhancements should be considered for inclusion in all waterfront open spaces. While many of these areas are already developed, and therefore not appropriate for open space development at this time, ecosystem-based management principles and retrofits should be considered wherever possible to ensure that shoreline retreat and flood protection are considered as measures to assist in adapting to projected sea level rise.

POLICY 2.5
Encourage the development of region-serving open spaces in opportunity areas: Treasure Island, Yerba Buena Island, Candlestick and Hunters Point Shipyard.

Several large, underutilized sites within the City offer not only the opportunity for new mixed use development to meet the City's housing needs, but the chance to create new, large scale region-serving open spaces.

- **Treasure Island**, the former naval base just off the City's northeastern shoreline, is planned to reserve over 60% of its land area for open uses, ranging from parks and ball fields, to organic farms, to wetlands and tidal marsh. Combined with open spaces on contiguous **Yerba Buena Island**, its 290 acres of proposed open space will be planted with a diverse and healthy range of plants which will help offset the city's greenhouse gas emissions. As a part of the planning for the redevelopment of Treasure Island, a Habitat Management Plan was prepared to assure the protection and restoration of wildlife habitat and biodiversity on the adjacent Yerba Buena Island. It is critical that the final designs of open space on these two islands, taken together, provide not only a range of playgrounds and recreational areas to meet the new residents' activity needs, but also offer strong, permanent protections for their wetlands and natural habitat. Agriculture and biodiversity components of this Management Plan should be developed to serve as educational and cultural amenities for the City and the region.

- **Hunters Point Shipyard and Candlestick Point** are currently undergoing a transformation into a vibrant, urban neighborhood and livable green community. Candlestick Point currently consists of the 49ers stadium, parking lot and the Candlestick Point State Recreation Area, of which only about half is improved. Hunters Point Shipyard consists of a decommissioned Naval Shipyard currently undergoing remediation with very limited public access. Plans for the two areas call for a well-connected, full breadth of complimentary uses. A major feature of the project is the robust open space program including upwards of 325 acres of open space, roughly 220 acres of which is being developed at the Hunters Point Shipyard. While the plans call for some reconfiguration of the existing Candlestick Point State Recreation Area (CPSRA) as provided for by SB 792, the reconfiguration will help assure the full realization of currently underutilized portions of the State park. The waterfront open spaces within this project will be the southern section of the Blue Greenway.

Taken together, the new open spaces will enable a continuous Bay Trail along this southeastern portion of the City, and provide a wide range of shoreline-oriented recreational opportunities that could include boat launches, fishing piers, restored wetlands, picnic areas, and food services. The new open space system should be designed in coordination with the proposed adjacent new urban neighborhoods and improve connectivity to the Bayview community, greater San Francisco, and the rest of the region.

POLICY 2.6
Support the development of civic-serving open spaces.

San Francisco is a civic city— celebrations, rallies, gatherings and protests take place almost weekly; political speeches, music, performances in the open air are also common occurrences. Our identity is defined as much by expressions of our social and cultural goals as it is by our physical landscape. These regular events in San Francisco emphasize the role of our City as a regional stage where like minds can gather and deliberate.

San Francisco needs civic spaces which can accommodate these activities – weekly events like farmer's markets, annual events such as the Pride Celebration, and special events such as broadcasting presidential inaugurations. As the City grows, these spaces need to accommodate ever-larger crowds of people and different types of functions – from simple gatherings to technical showcases and wired events. The main opportunities to unify and bolster City landmarks and activity centers are focused around three major open spaces:

- **Civic Center:** Our existing Civic Center, surrounded by City Hall, the Main Library, the Asian Art Museum, and other civic spaces, hosts many of the activities described above. The Civic Center is part of the Civic Center Historic District with National, State, and Local designations. Civic Center's design, however, limits its capacity and functionality, with activities often spilling into less optimal public spaces such as nearby streets. The nearby UN Plaza provides additional activity space that is used for weekly farmers and craft markets, but the two spaces are generally underused outside of scheduled activities and are separated by a virtual parking lot along Fulton Street between Hyde and Larkin Streets. A series of connected open spaces, along a "Civic Center axis" from Market Street to City Hall, could be created with the development of a pedestrian mall along Fulton Street between the Main Library and Asian Art Museum, and with corresponding activity improvements to increase the usability of the Civic Center and UN Plazas. The Civic Center Public Realm Plan provides a blueprint for realizing these goals.

- **Embarcadero Open Spaces:** At the other end of Market Street, the numerous yet underutilized open spaces along the Embarcadero – Embarcadero Plaza, Justin Herman Plaza, and Sue Bierman Park- offer a glaring opportunity for synthesis into the City's gateway civic open space. Inspiration can be found in Millennium and Grant Parks in Chicago. Just as they serve as Chicago's front door, San Francisco needs a civic space for large outdoor events – a place where arrivals can be greeted by the vibrancy of the City, and where its citizens can gather for moments of great joy or great mourning. A series of linked outdoor "rooms" would enable the reconnection of Market Street to the Ferry Building, enhance visual connections to the Bay, activate public space edges with uses that draw people to inhabit and use the space, and create a series of distinct activity spaces for civic and news events, large gatherings, and performance space.

- **Market Street:** Market Street, San Francisco's premier street and most important destination, is more than the city's primary corridor for Downtown movement; it also acts as a civic and cultural center where people can gather to see, learn and participate in our city's vibrant life. The Better Market Street initiative is currently underway to enhance public life along Market Street with a memorable and active identity; more diverse range of social, cultural, and economic activities; and with more gathering spaces to visit, promenade and linger. These changes will complement the transit and bicycling improvements that are also an integral part of Better Market Street

- **Hallidie Plaza:** Hallidie Plaza is a prominent San Francisco public space. Many more people visit Hallidie Plaza every day than any other plaza in San Francisco because of its proximity to shopping, hotels, and theatres. Despite these attractive qualities, Hallidie Plaza has never met its potential to be a world-renowned space where residents and visitors alike come to meet. The multi-level design fractures the plaza, making it impossible to create a place at street-level that can accommodate any sort of meeting space. The Better Market Street Project included preliminary designs for Hallidie to suggest different directions the City could go. Further, there were several conceptual designs developed in the early 2000s that highlighted preferred elements for the plaza, but no definitive design. These should be used as the basis for a design competition, hosted by the Planning Department.

  Given the financial constraints San Francisco will continue to experience for the foreseeable future and the anticipated cost of fixing Hallidie Plaza, there will need to be a public-private partnership that brings philanthropic funding to match City contributions. Building the partnerships necessary to support the refurbishment of Hallidie Plaza should remain a high priority for the City so that the space can become a destination with iconic value to both San Franciscans and our many national and international visitors.

POLICY 2.7
Expand partnerships among open space agencies, transit agencies, private sector and nonprofit institutions to acquire and develop new open space, and maintain, improve, and manage existing open spaces.

Public agencies and private organizations and individuals are working to maintain open space in the Bay Area. These bodies include the Federal Government, the State of California, local governments, several sub-regional open space agencies, as well as public nonprofit organizations and private landholders. Preserving a regional open space system is beyond the scope of the seventy-odd local governments in the nine-county Bay Area. Valuable open spaces cross city and county lines and individual municipalities have neither the regulatory powers nor the funds to retain them. Preservation of such spaces will depend upon regional action.

The City should facilitate efforts of existing agencies and organizations working toward regional open space goals. The City should encourage and work with these groups to secure additional land for open space retention and management, and to maintain existing open space areas in their current undeveloped open space status. The City should also support use of selected areas of open space lands within its jurisdiction for appropriate recreational uses.

POLICY 2.8
Consider repurposing underutilized City-owned properties as open space and recreational facilities.

All major metropolitan areas face challenges in providing sufficient open space due to lack of available land. While vacant or underutilized sites may be found, they are in high demand for private commercial or residential development, driving competitive land prices which are often too expensive for public acquisition. In order to meet the City's need for new open spaces in these high needs areas, the City should creatively look at the resources it already has – sites already in public ownership.

Surplus Sites: Occasionally public agencies find some land surplus to their current and projected needs. When public land becomes surplus to one public use, San Francisco's Surplus Property Ordinance, passed in May 2004, requires the city's surplus property be considered for affordable housing. Some such parcels are not feasible for housing because of their size or shape. When surplus land is already zoned for open space, open space should take priority over other public uses, including housing. When other surplus land becomes available for review as open space, the City should evaluate its suitability as a park site based on suitability criteria described in Policy 2.1 and in RPD's Acquisition Policy while considering other public benefits the land could provide. If the analysis finds the property necessary for open space usage, the City should consider if and how to transfer the property to the Recreation and Park Department under the procedures determined in SFRPD's Acquisition Policy for jurisdictional transfers.

Publicly Owned Sites: The City should evaluate all publicly-owned sites in high needs areas (see summary *Map 7: High Needs Areas: Priority Renovation & Acquisition Areas*) to determine their feasibility for full or partial park site usage. Some of these sites may be underutilized and therefore available for purchase or swap—these should be reviewed for potential transfer to or purchase by RPD. Other sites may be currently utilized for valuable public purposes, but could offer opportunities for joint use. For example, public parking lots that are underutilized on weekends could serve as active recreational spaces during off-business hours, and could even be improved with reinforced turf systems that create greened parking areas. Public buildings could be evaluated for their potential to provide active roof space, which could be creatively developed as green spaces accessible to the public during certain hours.

The opportunity to create open spaces on neglected or overlooked city owned parcels should be explored, particularly in high needs areas – such designs could repurpose existing infrastructure in unique and exciting ways. For example, the award-winning Gas Works Park in Seattle is built on a former coal plant site. More recently in New York City, an abandoned elevated rail track was redesigned as the High Line park, a wildly successful public space that drew over two million visitors in its first year and earned several design excellence awards. The City should consider the innovative reuse of abandoned, vacant or excess city owned land of all shapes and sizes.

Public Rights Of Way: As described in Policy 3.1 below, numerous streets, alleys, schoolyards, and other rights of way offer potential for cooperative recreational use. City departments and State agencies, such as the Municipal Transportation Agency and Caltrans, own and operate spaces that could be better utilized to serve as open spaces throughout the city. Spaces under freeways could serve as skate parks and bicycle paths, while city-owned parking lots could be developed as open space.

POLICY 2.9
Address physical and bureaucratic barriers to opening schoolyards as community open space during non-school hours.

During school hours, schoolyards provide students with a space to learn, socialize, exercise and play. They also often provide the greatest expanse of open space available in their immediate neighborhood. But if the neighborhood cannot tap into that resource when the school day is over, the schoolyard becomes a lost opportunity for half its life. Opening these spaces for use during these times could provide much needed additional space in areas that are currently deficient in open space. This could prove mutually beneficial in that it could provide additional revenue for the school district and large new open spaces for residents without the high costs of acquiring new spaces.

In 2008, the San Francisco Unified School District (SFUSD) and the City launched a pilot program which opened eleven school yards to neighborhoods during weekend hours. This program has been successful in increasing community access to recreational space without any corresponding significant damage to school property. The program has continued to expand, to 21 schools in total, and offers many benefits to participating schools, such as open space improvements, grants to support physical education, gardening activities during the school day, and an activity fund to provide weekend activities open to the public. Schools receive maintenance, programming, and surveillance support from San Francisco Department of Public Works, San Francisco Recreation & Parks Department, and the San Francisco Police Department.

The City should consider ways to better market the availability of these spaces through multi-language signage and events in the space. Continued efforts to add greening to schoolyards would provide benefits to students as well as the neighborhood. As the program continues to expand, additional funding may be needed to address staffing, programming, and operational needs that come along with any joint use project. In addition, based on lessons learned from joint-use agreements thus far, the city should review and further codify the structure of its joint-use agreements to ensure consistency and ease of implementation.

The lessons from this pilot project could also be applied to other public or quasi-public sites. For example, as a next step the City could look at small branch libraries or child care centers as opportunities for increasing public access. The City should also approach private schools throughout the City and attempt to gain their support for such a program on their properties. Other cities have successfully established mutually beneficial joint use or development agreements that opened the privately-owned open space to the public. Private schools could use this vehicle as a way to be "good neighbors" that contribute to neighborhood needs, similar to private recreational facilities offering neighborhood discounts. Where liability is an issue, the City should look to equitably share liability with private entities or among multiple agencies.

POLICY 2.10
Improve access to and level of activity provided at San Francisco reservoirs.

The San Francisco Public Utilities Commission (SFPUC) owns and manages a significant amount of open space lands in San Francisco, as well as sites in Alameda, Santa Clara and San Mateo Counties. These lands are managed as watershed lands and serve as the city's major water source; in some cases these sites also serve as open spaces with scenic easements, and have recreational features such as playgrounds, walking paths, seating areas and even golf courses. The SFPUC has recently expanded uses on its lands to include sustainable agriculture and composting.

Because of the SFPUC's mission to protect public health and safety by ensuring water quality and the filtration capability of the existing system, these sites need to be carefully managed, and in some cases large-scale public recreational use is not possible given such constraints. However, increased public access to portions of its watershed lands with high recreational value is still possible, particularly on certain opportunity sites where the water quality would not be threatened.

Several of the SFPUC's treatment, tank or station sites may offer the potential to yield limited right-of-ways connecting proposed trails or greenways discussed elsewhere in this Element. Such connections, however, must be limited to pedestrian crossings, and made with consideration of safety of the underlying substructure and whether there is risk of potential degradation.

Future leases and lease renewals on watershed lands should be consistent with protection of existing natural values. Watershed lands should be managed to limit potential fire and erosion hazards. Access should be consistent with the legal rights of existing tenants, and with the intent of existing scenic and recreational easements.

The SFPUC should seek to increase public access to and enjoyment of surplus sites by seeking funding for site improvements, better access, and the ability to address safety issues at existing and potential open space properties.

In the case of reservoir lands outside of the City and County of San Francisco, the SFPUC has several long-standing agreements for the recreational, educational and agricultural use of its lands. These agreements have gone through extensive public processes and any change to the agreements would involve additional outreach and review. Some examples of successful joint-use of SFPUC lands include: Sawyer Camp Trail, one of the most popular trails in San Mateo County, which is located inside the Peninsula watershed and passes by the reservoir; and the Sunol Water Temple AgPark, an urban farm located on SFPUC land in Alameda County.



MAP 9 - School Yards & SFPUC Sites With Open Space Potential

POLICY 2.11
Assure that privately developed residential open spaces are usable, beautiful, and environmentally sustainable.

In order to improve living conditions in each residential building and the quality of environment in San Francisco as a whole, the City should continue to require that all new residential development provide outdoor open space. Current San Francisco Planning code requires a minimum amount of open space and this minimum must be maintained. However, open spaces should not only meet a minimum size requirement but should also be usable, quality recreational opportunities directly outside residents' front door, and they should also supplement any public open space that is provided nearby.

In single-family districts, rear yards are required and these yards provide much-needed open space for use by residents, natural habitat value, as well as stormwater management benefits. In most multi-family zoning districts, a minimum of 60-125 square feet per unit is required. In some areas such as Downtown, Chinatown, and high-density residential zoning districts, minimum open space requirements can dip as low as 36 square feet per unit. This requirement is too low, especially for areas that correspond with the high needs areas in *Map 7*. Comprehensive planning in these areas should consider if the requirements should be increased or how open space needs can be met with alternative methods.

In multi-unit developments, providing required open space as common space has many benefits. It provides a collective place for residents to gather, allowing residents to get to know their neighbors and fostering a sense of community. It also provides larger areas for explorative play for children, something small balconies and private spaces usually cannot provide. Finally, it can be more space-efficient than providing numerous smaller spaces, especially if placed on rooftops or adjacent to common entry points where space for access is already required. Common open spaces can expand these benefits to the broader neighborhood as well, if they are publicly accessible during safe times of the day, such as daylight hours, or if they contribute to scenery by being visible from the street. Therefore, open space requirements should include incentives to promote the provision of common open space, and publicly accessible common open space in particular.

The value of private open spaces rests largely on their design. Open spaces should be designed to relate to the type of development they support; while lower density districts may typically include ground level or rear yard gardens, higher density residential development can include not only rear yards or common courtyards at grade level, but also balcony, terrace and rooftop open space. Whatever type of open space is provided, it should be usable with landscaped areas that add greenery. Elements such as playground equipment, lawns, and gardens should be considered as well, based on the expected resident population of the project. Appropriate minimum amounts of open space and guidelines should be developed to codify these recommendations.

Open space in the downtown urban core is already very limited, and continued development will make meeting these higher requirements both more challenging and more necessary in order to maintain livability. Rooftop open spaces can provide a promising way to meet this challenge. Aside from the environmental benefits of roof greening – reduction of stormwater runoff, improvement in air quality, and reduction in energy used for building heating and cooling – green roofs can help to meet a number of the City's open space goals, from recreational enjoyment, to aesthetic improvement and greening of urban landscapes, to increased local food production and increased biodiversity. To enable quality roof space that provides these benefits, roofs should be constructed with load bearing capacity that can accommodate minimum soil depths for planting, or should at minimum support expected person occupancy and potted plantings. Design considerations also include safety, how the space overlooks neighboring properties, and where access can be provided.

POLICY 2.12
Expand the Privately-owned Public Open Spaces (POPOS) requirement to new mixed–use development areas and ensure that spaces are truly accessible, functional and activated.

In denser neighborhoods of the City, Privately-owned Public Open Spaces (POPOS) are a critical strategy to promote livability and provide much-needed spaces for relaxation, enjoyment of greenery, and socializing with others.

POPOS have been provided in a wide range of forms including outdoor seating with landscaping, to beautiful rooftop terraces, or indoor atriums. The quality of these spaces varies greatly, with some of them providing true oases with trees and planters and ample seating; while others are dark, tucked-away spaces that are accessible in name only. While this type of space can never replace true public open space, these spaces should be accessible to the public and should provide features to create a functional and pleasant open space. The City should deploy a variety of tools to educate the public of the existence of POPOS, especially in cases where such spaces are tucked away from the sidewalks—located on the building's rooftops or on the back of the building. The City should enforce all violations by existing POPOS, ensuring that they meet the conditions they were required to meet when the development was approved. The City should also reevaluate the guidelines provided in the Downtown Plan for required features of each type of POPOS, including seating, access to public restrooms, landscaping, and ecological functionality, to determine how to improve these open spaces. Additionally, the City should consider ways of allowing increased activation of the space and provide quality bicycle connections to these spaces.

POPOS have traditionally served the denser downtown core, a result of policies adopted in the 1980s mandating that new large commercial developments provide publicly-accessible open space. These policies should be evaluated to determine how POPOS requirements can be strengthened and expanded citywide. For instance, fee requirements could be extended to all types of development projects of a certain size (not just commercial uses) and provide an in-lieu fee option, as is the case in the Transit Center District Area Plan. Similarly, the Eastern Neighborhoods plan allows developers to satisfy some portion of private open space requirements by providing publicly accessible open spaces. Moving forward, POPOS requirements should ensure that such open spaces are designed and maintained to accommodate and attract a diverse range of users.

OBJECTIVE 3
IMPROVE ACCESS AND CONNECTIVITY TO OPEN SPACE

San Francisco is a dense, built-out city, where it may be difficult and expensive to acquire new land for parks and open spaces. Even though acquisition remains an important means to improve open space access, San Francisco's street network provides an untapped opportunity to supplement the city's open space system and link the network of open spaces. The street network, which makes up 25% percent of the City's total land area, is a valuable public space asset that can incorporate many types of open spaces, such as pocket parks, play streets, trails, and walkable streets and bike routes. These systems can connect residents to larger parks and open spaces and serve as restorative green spaces in their own right, places where residents can interact with urban nature on their doorstep. This system should be clearly legible, and include signage to guide pedestrians to and through the larger open space system.

POLICY 3.1
Creatively develop existing publicly-owned right-of-ways and streets into open space.

San Francisco's right-of-ways offer a variety of opportunities for developing open spaces. Streets can supplement traditional open spaces with standard streetscaping improvements such as bulb-outs, crosswalk improvements, tree planting, and pedestrian lighting. More extensive traffic calming on expanded or existing wide sidewalks can create additional pocket parks, sitting areas, and opportunities for sustainable plantings, community gardens, stormwater treatment, and other landscape elements.

Green Connections

Green Connections are special streets and paths that connect people to parks, open spaces, and the waterfront, while enhancing the ecology of the street environment. By increasing greening in the right-of-way with street trees, sidewalk gardens, and other landscaped areas, these streets will become sustainable corridors that enhance mobility, green neighborhood streets, and improve pedestrian and bicycle access to community amenities and recreational opportunities.

Living Alleys

The City's network of alleyways– small-scale, quieter streets that primarily serve vehicles needing access to adjacent properties—can provide vibrant open spaces, especially in dense neighborhoods. Some alleys, such as Belden Place in the financial district, are currently closed to traffic and provide an intimate atmosphere where patrons of adjacent restaurants can enjoy outside dining amidst a bustling urban environment. Other alleys, such as Maiden Lane, are closed during certain times of the day, serving adjacent businesses during the day, but allowing deliveries during the evening hours. Still other alleys, such as Linden Alley, are open to traffic, but carefully designed to ensure that drivers proceed slowly and with caution. These alleys are designed with seating, landscaping, and pedestrian-scale lighting to create useable and attractive open spaces. All three alley types should be considered and encouraged.

In some residential neighborhoods in the City, such as Visitacion Valley, Mission Terrace, Crocker Amazon and Bayview Hunters Point, there are narrow, unpaved alleyways that originally provided service vehicle access before paved roads were built. These abandoned and overgrown spaces can provide much-needed spaces that supplement the traditional open space, potentially providing walking and biking paths, or seating, landscaping, and lighting appropriate to the area. Using the City's Better Streets Plan, the design for the different types of alleys can be implemented. The City should study different neighborhood needs and determine a priority plan for creating living alleys in areas most in need of these improvements.

Living Streets

Living Streets are wider streets where sidewalks are expanded into excess right-of-way to accommodate formal open spaces or linear parks. Wide streets that have excess right-of-way provide an opportunity to develop living streets, especially where dense residential developments are being built. Many of these areas are deficient in open space, and the streets should be designed with places for relaxation, recreation, and neighborhood gatherings.

Enhancing Existing Parkways

Parkways are streets with broad, well-landscaped medians and sidewalks that provide recreational paths while moving bikes and vehicles. These streets function not only as transportation corridors, but also as linear parks, creating a green network. This green space can often be effectively used for pedestrian and open space functions, by providing multi-use trails, seating, and open spaces. They can also perform ecological functions, including stormwater runoff retention and infiltration and creating habitat. Two of the existing parkways, Park Presidio Boulevard and Sunset Boulevard, offer a major opportunity to enhance the north-south connections from Golden Gate Park. These streets already provide ample trails and open space, but are in need of overall care, improved crossings, and enhancement. By utilizing the existing open spaces offered by these parkways, the City is focusing on how to make the most of what we have. The City should develop a specific design program to address the enhancement of these two parkways.

Temporary and Permanent Street Closures

The City's Sunday Streets program – which was modeled on a 25-year program in Bogota, Colombia – has been a huge success. The proposal began in 2008 with the idea to close one street to cars on Sunday mornings so people can get out and be active in a car-free space. The program has since expanded to offer more opportunities for temporary public gathering spaces. Additionally, City agencies' collaborative effort to transform excess pavement into public spaces is on-going and several projects are being initiated around the city. This concept of temporary or even permanent street closures in the City presents a great opportunity to take advantage of existing street rights-of-way to create space for people to walk or ride their bike.

See *Map 3: Existing and Proposed Open Space* for more information on existing and proposed green street concepts.

POLICY 3.2

Establish and Implement a network of Green Connections that increases access to parks, open spaces, and the waterfront.

Despite San Francisco's many open space assets, park accessibility can be a challenge, particularly for those on bike or foot. For decades, streets have been built to maximize car volume and speed, resulting in roads with fast-moving traffic, inadequate pedestrian and bicycle facilities, and other barriers can that make it difficult and unpleasant for people to walk, bike and use other forms of active transportation.

In recent years, San Francisco has made great strides in retrofitting streets with pedestrian and bicycle improvements that make it easier to access parks, schools and other neighborhood destinations. Green Connections builds on this work, envisioning a 115-mile network of safe, functional, and attractive streets connecting people to parks, open spaces, and the waterfront. Green Connections is designed to meet three goals:

- Public Health: Increase park access
- Sustainability: Enhance urban ecology
- Livability: Support neighborhood stewardship and placemaking

Routes on the Green Connections network should significantly calm traffic, prioritize pedestrian and bicycle travel, enhance urban ecology and ecoliteracy, include beautification and artwork, and provide opportunities to gather and play. Routes will also be designed to be consistent with the Better Streets Plan, which creates a unified set of standards, guidelines, and implementation strategies to govern how the City designs, builds, and maintains its pedestrian environment to ensure streets contribute to a gracious public realm.

Green Connections will not create a new City program, rather, it calls for coordinating existing initiatives such as traffic calming and stormwater management, with the goal of creating a cohesive network of improved neighborhood walking and bicycling routes over the next twenty years. The scale of the network creates opportunities to coordinate with city projects and private development. Additionally, community members and neighborhood groups will play an important role in the Network's implementation and stewardship.

See *Map 10: Green Connections Network*.

MAP 10 - Green Connections Network

POLICY 3.3

Develop and enhance the City's recreational trail system, linking to the regional hiking and biking trail system and considering restoring historic water courses to improve stormwater management.

San Francisco currently has an extensive network of trails that provide local opportunities for walking and biking and link to regional trails and open spaces throughout the Bay Area. These trails surround the Bay, parallel the ocean, extend through parks and neighborhoods and connect existing open spaces. Many of these trails have gaps and lack adequate signage. The City should prioritize filling these gaps and increasing awareness of the trails through updated signage. New trails are also envisioned to provide additional hiking and biking opportunities and important wildlife corridors. The City should also work with Daly City and San Mateo County to encourage better links to San Bruno Mountain and trails to the south.

New trails throughout the city could consider historic water courses to incorporate stormwater management, provide trail connections, or restore aquatic and riparian habitats or wildlife corridors. These trails should provide better ways to move people through increased hiking and biking opportunities. Some adopted Area Plans, such as the Glen Park Area Plan, have identified such opportunities.

MAP 11 - San Francisco Bay Trail

Continuous Waterfront Trail

The trails along the waterfront are administered by many different jurisdictions including regional, city, and federal agencies. However, visitors do not necessarily distinguish between these jurisdictions, and want a continuous, usable trail system along the waterfront. The City should improve trail signage to ensure users are provided clear routes and destinations and work to fill any gaps in the proposed trails and in the connections between them where it does not impede on water dependent commerce.

Bay Trail

The Bay Trail is a regional trail developed by the Association of Bay Area Governments (ABAG) that is proposed to surround the entire San Francisco Bay. In San Francisco, this trail would extend from the Golden Gate Bridge along the bay to the Central Waterfront neighborhood, where the trail is being built inland along Illinois Street through Pier 70 (which, along with the Power Plant site, will eventually provide opportunities for waterfront access). The Bay Trail will eventually continue around the Bay through Hunters Point Shipyard and down to San Mateo. (See *Map 11: San Francisco Bay Trail*.) The gaps are shown in *Map 11* and the City should prioritize closing these gaps to ensure a complete Bay Trail. Closing the Bay Trail gaps would also help in the development of the Blue Greenway, a continuous corridor that links the existing and proposed open spaces through the Bay Trail and the San Francisco Water Trail. The City's Blue Greenway project intends to complete San Francisco's southeast section of the Bay Trail and that portion of the Bay Area Water Trail, described below.

Coastal Trail

The California Coastal Trail is a network of trails for walkers, bikers, equestrians, wheelchair riders, and others along the entire 1,200 miles of the California coast. Through San Francisco the 10.5 mile trail connects many scenic and tourist attractions along the coastline, including the Golden Gate Bridge, the Presidio, Ocean Beach and Fort Funston. While the current trail is relatively complete, prioritizing improvements such as signage and fixing small gaps would ensure that the trail is accessible and visible for its entire route.

Bay Area Water Trail

The State Coastal Conservancy is leading the implementation of the San Francisco Bay Area Water Trail Plan (Water Trail Plan), a new regional access project. The Water Trail is a network of access sites (or "trailheads") that will enable people using non-motorized, small boats or other beachable sailcraft—such as kayaks, canoes, dragon boats, stand-up paddle and windsurf boards—to safely enjoy single and multiple-day trips around San Francisco Bay. This regional trail enhances Bay Area communities' connections to the Bay for water recreation activities, and creates new linkages to existing shoreline open space and other regional trails, such as the Bay Trail. The Water Trail will include educational, stewardship, and outreach components.

The Bay Area Ridge Trail

The Bay Area Ridge Trail is a multi-use trail that links the hills and ridges of the nine counties of the Bay Area. It will be approximately 550 miles in length when completed. Most of the 13.5-mile portion of the trail in San Francisco was completed in 1992 and is in the process of being reevaluated by the Bay Area Ridge Trail Council, with the goal of improving its route, signage and connections to other city and regional trails. The City should work with the Council and the community in this rerouting effort, especially one that takes users through parks and makes connections to other trails, such as the Bay Trail, the Coastal Trail, and the proposed new cross-town corridor described below. The City should also assist the Ridge Trail Council in its efforts to improve signage along the route. *See Map 12: Regional Trails*.

MAP 12 - Regional Trails

New Cross-Town Corridor

A proposed corridor would connect wildlife habitats and allow hikers an urban wildlife trail experience through some of the City's most diverse natural areas. The corridor would begin in the Presidio, travel through Golden Gate Park, stop at Twin Peaks and Mt. Sutro, wind through Glen Park Canyon, then McLaren Park, and finally reach the San Francisco Bay in Candlestick Point Recreation Area. While the exact route of this proposed new corridor has yet to be determined, it could include an extension to connect with Lake Merced and opportunities to daylight historic creeks in an enhanced green corridor. The City should work with pertinent Federal, State, and local agencies along with the community to develop this new corridor.

POLICY 3.4
Encourage non-auto modes of transportation – transit, bicycle and pedestrian access—to and from open spaces while reducing automobile traffic and parking in public open spaces.

San Francisco's transit first policy, adopted by the Board of Supervisors as Section 8A.115 in the San Francisco Charter, emphasizes the importance of providing and prioritizing transportation via transit, walking, and bicycling for all trips in the city including to parks and open spaces. Non-auto transportation is especially important because many of the City's large parks are located far from dense population centers and high needs areas. While the City's extensive network of transit allows users to access all of the City's parks, crossing the City, especially on a weekend, can often entail multiple transfers and long waits because of less frequent service. The City should consider increased and/or express local bus service to major open space amenities particularly from high needs areas. The City should also explore the idea of a "Green Transit Program," a bus that delivers riders from the City's high needs areas to large parks. This service should be affordable and allow families an easy way to access the City's large open spaces. Additionally, the City should improve transit access to regional open spaces outside of San Francisco such as Marine Headlands, Mount Tam, Pacifica beaches, and the San Bruno Mountains.

Bicycle routes that serve to get riders to and around our open spaces also provide a key component of the city's non-auto transportation network. Many of the improvements in the City's Bicycle Plan address the need to connect people to open spaces. The City should prioritize bicycle improvements that provide both a connection to the City's open spaces and serve as the most heavily utilized routes. For example, the improvements suggested along the panhandle would improve access to the Panhandle and Golden Gate Park as well as facilitate this route as a commuter corridor for bicyclists. The City should also work to provide bicycle parking at entrances to park facilities and throughout large open spaces to promote increased bicycle usage. In August 2013, the Bay Area BikeShare was launched with 34 San Francisco locations. The City should consider expanding those locations to serve major parks and open spaces, like Golden Gate Park, that are on the City's bike network.

Heavy or fast traffic in and around public open spaces endangers pedestrians, limits access to open space, endangers plant and animal life and makes the open space less enjoyable to be in. Excessive parking spoils the user experience and untimed parking encourages non-park users to park, restricting availability of spaces for park visitors and residents alike. The following methods of reducing traffic in and around public open space are consistent with the urban design and transportation elements of the General Plan and should be applied where possible:

- Consider eliminating some roadway cut-throughs and ensure new roads are necessary for park access, not only as through-ways.
- Increase traffic calming on roads. Reduce the capacity of roads in public open spaces to encourage slower travel and provide safer routes for pedestrian and bicycle travel.
- Establish strict speed limits. Monitor speeds throughout the parks and ensure that strict speed limits are enforced.
- Study and implement, where appropriate, timed parking that supports typical-length visits to a park, but discourages all-day parking during the week.

POLICY 3.5

Ensure that, where feasible, recreational facilities and open spaces are physically accessible, especially for those with limited mobility.

The City should ensure that recreational facilities and public open spaces are accessible to all San Franciscans, including persons with special recreational needs, where feasible. For example, the hilly topography of the City makes providing some paths ADA accessible difficult to achieve. People with special needs may include seniors, children (particularly the very young), and people with disabilities. In order to achieve this policy, park and recreation facilities should be planned and programmed for people with special recreational needs in mind. The following criteria should be followed when developing or renovating any new space:

- All parks and open spaces should comply with applicable requirements of the Americans with Disabilities Act and the California Building Code.
- The City should utilize the US Access Board's recreation facilities and outdoor area accessibility guidelines as a best practice for design and construction.
- The City should also ensure that routes to and from the open spaces are accessible. For example, the route from the public transit stop to the park should be fully accessible.

POLICY 3.6

Maintain, restore, expand and fund the urban forest.

Trees and understory plantings in city parks, developed public open spaces, city streets and private property collectively form the urban forest. The urban forest contributes substantially to our quality of life and to the ecological functioning of our city. Trees and landscaping soften the urban environment, provide habitat, improve air quality, absorb carbon and mitigate stormwater runoff. Given these benefits, trees are an essential piece of the City's infrastructure. The urban forest requires consistent maintenance, funding and long-term planning to ensure its health and growth over time.

The SFRPD plants and maintains a variety of landscaping, including approximately 131,000 trees in city parks and other SFRPD open spaces. The Department of Public Works, Bureau of Urban Forestry (BUF) has permit jurisdiction over 105,000 trees and landscaping in the public right-of-way and provides maintenance along designated streets. Finally, property owners maintain trees within their property line as well as street trees and landscaping along their street frontage on streets not maintained by BUF.

The Planning Department, in collaboration with the Department of Public Works, has created a plan to promote San Francisco's urban forest with a focus on street trees. The Urban Forest Plan – Phase 1: Street Trees (2014), adopted here by reference, identifies policies and strategies to proactively manage, grow and protect the City's street tree population. A corresponding planning effort is needed, focused on policies and recommendations pertaining to trees in parks and open spaces. The Urban Forest Plan - Phase 2: Trees in Parks & Open Spaces should be funded and carried out. Many of the city's trees and understory plantings in our parks have reached maturity and are in a state of degradation. A thorough tree replanting strategy in parks and open spaces that addresses not only hazardous trees, but also develops a comprehensive replanting strategy that includes a system-wide prioritization framework, should be pursued. In addition, a third phase of urban forestry planning (Urban Forest Plan - Phase 3: Buildings and Private Property)should be completed to present recommendations for trees and landscaping on private property as well as on building (i.e. living architecture, green roofs and walls). The completion of all three planning phases will produce a holistic vision for the City's urban forest.

Urban forestry planning in San Francisco requires a Citywide Street Tree Inventory and Parks Tree Assessment to gather the data needed to achieve a higher level of tree management and care. The Citywide Tree Inventory should include geographic location, tree species, size, age, and disease classes, and other related information for trees within the public right-of-way. A Parks Tree Assessment should evaluate the condition and needs of trees under SFRPD's maintenance purview. Upon completion of these studies, property owners should be encouraged to plant trees and landscaping fronting their property consistent with the City's Urban Forest Plan and DPW's tree and landscaping planting guidelines. Additionally, the City should seek long-term funding sources to maintain and expand the urban forest on streets and parks. Codes relating to planting and maintaining street trees and landscaping in public spaces, parks, along public right-of-ways and within private property should be rigorously enforced to in order to maximize the extent, health, and longevity of the City's urban forest.

OBJECTIVE 4

PROTECT AND ENHANCE THE BIODIVERSITY, HABITAT VALUE, AND ECOLOGICAL INTEGRITY OF OPEN SPACES AND ENCOURAGE SUSTAINABLE PRACTICES IN THE DESIGN AND MANAGEMENT OF OUR OPEN SPACE SYSTEM

San Francisco is a heavily urbanized city, which nonetheless has a rich variety of plant and animal communities. Among these are coastal scrub, grassland, oak woodlands, marsh, and stream-side habitats and their associated wildlife. Some of these habitats hold species found nowhere outside of the Bay Area. The City also has significant landscaped areas, such as conifer plantings in Golden

Gate Park. By providing food and shelter for migratory and resident birds, butterflies, and insects they too play a major role in supporting San Francisco's biodiversity. Biodiversity includes the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur. Maintaining biodiversity requires genetic diversity, species diversity, and habitat diversity. San Francisco can be a leader in creating new and more sustainable open spaces by ensuring that all open spaces, including new and renovated park spaces, are developed in a way that enhances and works with local biodiversity.

POLICY 4.1
Preserve, protect and restore local biodiversity.

San Francisco's ecological communities include freshwater and tidal wetlands, riparian areas, grasslands, coastal prairies, oak woodlands, coastal scrub, dunes, rock outcroppings and our designed landscapes. Some of these areas serve as habitat for unique species including many rare and endangered species, such as the red-legged frog, snowy plover, and mission blue butterfly. Yet San Francisco continues to lose species diversity due to isolation and fragmentation of habitats and invasive species.

Parks and open spaces in San Francisco include both native and non-native species, both of which can contribute to local biodiversity. The City should employ appropriate management practices to maintain a healthy and resilient ecosystem which preserves and protects plant and wildlife habitat, especially rare species which are the primary contributors to local biodiversity.

Restoring some ecosystems would also help enhance local biodiversity. Wetlands and riparian areas, for example, provide habitat, biological benefits, and resource-efficient methods for treating storm water runoff in addition to serving recreational uses. However, many of San Francisco's wetlands have been buried by development and little of the original wetlands have survived in San Francisco. A number of restoration projects have recently been completed or are underway, including projects at Crissy Field, Heron's Head, Pier 94, Mountain Lake and Lake Merced. The City should continue to support the monitoring and restoration of these wetlands.

The long-term vision for the City should also include conserving and restoring hydrological resources, including riparian communities, seeps, springs, creeks, ponds, and lakes; and exploring the feasibility of day lighting creeks that are completely or partially buried, for example Islais Creek, Yosemite Creek and Mission Creek. In order to ensure the preservation and restoration of our local biodiversity, the City should increase awareness of the benefits of all ecological communities as well as how the public should and should not interact with these areas.

POLICY 4.2
Establish a coordinated management approach for designation and protection of natural areas and watershed lands.

San Francisco's natural areas are the undeveloped remnants of the historical landscape which contain rich and diverse plant and animal communities. Following the adoption of the 1986 Recreation and Open Space Element, the SFRPD exacted policies to develop a Natural Areas Program to manage the 530 acres of parks and portions of parks that constitute natural areas. The mission of the program is to restore and enhance remnant natural areas and to develop and support community-based stewardship of these areas. Policies governing access and appropriate use and enjoyment of protected natural areas should ensure that the natural resource values are not diminished or negatively affected by public use.

In addition to the SFRPD-owned land, there are a number of natural areas under the jurisdiction of other city, state and federal agencies and in private ownership. The long-term ownership and management of these lands is uncertain because these properties are not under rules and restrictions that would prevent them from being sold and/or developed. The City should ensure that a comprehensive inventory of all natural areas owned by city agencies other than the Recreation and Park Department and by private landholders is developed, in order to preserve the City's biodiversity and natural areas more holistically. This inventory should include promoting habitat corridors among open spaces and natural areas. The following criteria should be used to determine what constitutes a significant natural resource area worthy of protection:

- The site is undeveloped and relatively undisturbed, and is a remnant of the original natural landscape and either supports a significant, diverse, or unusual indigenous plant or wildlife habitat, or contains rare geological formations, or riparian zones.
- The site contains rare, threatened, or endangered species, as identified by the U.S. Fish and Wildlife Service or California Department of Fish and Wildlife, or contains habitat that has recently supported and is likely again to support rare, threatened, or endangered species.
- The site is adjacent to another protected natural resource area and, if protected from development, the two areas together would support a larger or more diverse natural habitat.

Given constraints on the City's financial resources, public acquisition for all natural areas that are in private ownership may not be an option. However, if such an area is at risk of loss through development, the site should be examined as a candidate for open space acquisition. Relative importance of the site as a natural area should also be assessed. If the area is not to be publicly acquired, the Planning Commission may require any development that is approved on the site to preserve the most important portions of the area, if found feasible and consistent with the Planning Code.

Once the significant natural resources outside the jurisdiction of RPD are identified, the City should develop a management plan for these natural areas. Many of the properties are currently managed by the City, State or Federal agencies whose mission is not consistent with the preservation of natural areas. In these cases, consideration should be given to joint management through a conservation district or a governmental entity that controls the management of these areas.

POLICY 4.3
Integrate the protection and restoration of local biodiversity into open space construction, renovation, management and maintenance.

The City should work to protect and enhance biodiversity throughout the parks and open space system. When parks and open spaces are renovated and new spaces are planned or acquired the City should work to ensure that these spaces are environmentally sustainable, from construction to management. New buildings and park features should protect and help restore local biodiversity. Appropriate criteria should be applied to different open spaces depending on the sensitivity of the habitat, the proposed uses, and the amount of space the new or renovated project will provide. However, certain key requirements, which the City is currently working on, will be applied to all new and renovated open spaces:

- **Soil conservation.** In order to conserve and to use local soil, a cut fill balance will be maintained where feasible to minimize the need to transport soil to or from the project site.
- **Native and drought-tolerant plants.** The City is working to replace invasive and water-intensive species and species of minimal habitat value with species that fit better with San Francisco's natural environment. Just as the City restores degraded areas with local native plants for wildlife habitat and biodiversity in natural areas, habitat and biodiversity should be considered along with traditional landscaping objectives of aesthetics and cultural value throughout our park system and in the streetscape. Drought-tolerant non-native plants can also contribute to the thriving of local biodiversity and meet many of these overall goals. To provide native and drought-tolerant plants, the City should continue to work with private entities and City agencies to encourage native and drought-tolerant plant nurseries.
- **Lighting.** Park lighting should be environmentally efficient and provide safety and security to park users, while being as limited as possible in order to protect wildlife in natural areas from the impacts of light pollution.
- **Habitat and Wildlife.** Where appropriate, utilize materials and design spaces, facilities and buildings in a manner that provides habitat for local and migrating wildlife.
- **Construction and Siting.** Utilize green building practices, local materials, services and supplies; site new structures in locations that minimize disruption of the natural environment; and mitigate impacts during constructions phases.
- **Waste Management.** The City should continue to enforce the no feeding of wildlife provision of the Park Code and manage recreational facilities to minimize wildlife access to human garbage.
- **Stormwater Management.** The City should continue to creatively solve for the management of stormwater runoff in our dense urban landscape. Managing the city's stormwater runoff in an environmentally-sensitive manner, such as using bioswales or through creek restoration could provide an increasingly biodiverse habitat.

POLICY 4.4
Include environmentally sustainable practices in construction, renovation, management and maintenance of open space and recreation facilities.

The City has been working to develop more sustainable practices in the development or renovation of their park and recreational facilities. Below are a number of programs that highlight efforts throughout the City.

- **Water conservation, recycling/reuse, and stormwater mitigation.** The SFPUC has developed a recycled water program with the North San Mateo County Sanitation District to use recycled water for three golf courses: Lake Merced Golf Club, Olympic Club, and San Francisco Golf Club. The SFPUC is also working on a treatment facility for recycled water on the city's west side. One of the primary uses of this recycled water would be to irrigate parks and open spaces in City property such as Golden Gate Park. The Recreation and Parks Department is the biggest user of water in the city, with an annual total usage of 691 million gallons of water. It is therefore critical to conserve potable water and promote alternative water resources such as recycled water and stormwater capture, especially for uses such as irrigation. Expanding the use of recycled water and considering other innovative treatments to capture and reuse stormwater runoff are being pursued by the SFPUC, the Recreation and Park Department, and the Office Community Investment and Infrastructure. Impervious surfaces are being limited or retrofitted to utilize pervious surfaces and innovative methods for capturing and reusing storm water, such as cisterns. Support for these efforts should continue, as they offer an easy and effective solution to water conservation and to potential water shortages caused by drought, earthquakes, or decline in the snow pack.

- **Energy production and efficiency.** The City's open spaces could serve as a source of energy for the City. For example, new or renovated buildings could utilize solar panels or other alternative energy sources. The SFRPD has also been a leader in the City in trying to reduce their energy usage. The goal is to realign the records so that meters are tied to park names and building names in order to have greater control of energy reduction measures. Currently, meter numbers are tied to physical addresses only with multiple meters and multiple addresses in one property.

- **Composting and Mulching.** The City has had a composting program since 1996. SFRPD is one of the leading partners and one of the biggest producers of green waste in the City. The recycling of this waste is used not only in city parks and in community gardens throughout the City, but is provided to farms and households for use in their private gardens.

- **Integrated Pest Management.** The City of San Francisco follows the award-winning Integrated Pest Management ordinance. The law requires that when the City is managing unwanted insects, rodents, birds, weeds, or other organisms for buildings & landscapes that the City follow a series of requirements including: how integrated pest management (IPM) is implemented, limitations on pesticide products, exemptions to the Reduced Risk Pesticide List (that may be used as a last resort), posting and notification for pesticide treatments, recordkeeping and data requirements, and accountability. The program must be followed by all city agencies and any city agency that leases land from the city.

- **Historic Preservation.** Appropriate repair and retrofitting of existing historic resources is an inherently sustainable strategy and ensures that the character and integrity of significant historic resources is maintained. Adaptive reuse, such as for new programming, accessibility, life and safety, and systems upgrades, is a strategy that can be used to conserve materials, minimize impacts to the environment, promote a sense of place, and improve livability.

OBJECTIVE 5

ENGAGE COMMUNITIES IN THE STEWARDSHIP OF THEIR RECREATION PROGRAMS AND OPEN SPACES

Residents can be a major asset in addressing open space needs, providing oversight, maintenance and stewardship. They can be instrumental in ensuring that recreation and open space activities are rooted in local needs and can offer a community-based solution to public sector gaps, particularly in times of budget constraints.

POLICY 5.1
Engage communities in the design, programming and improvement of their local open spaces, and in the development of recreational programs.

The most successful public spaces are those that respond to the needs of their users. Statistics, maps and figures can only go so far in determining a community's need – they can explain proximity to open space, they can describe type of open spaces that are missing (hiking trails, sports fields, playgrounds, access to and from open water, etc.), but they cannot identify the components of open space design which will most reflect their user community.

Open space designs and improvement plans, recreational programs, partnerships for new concessions, and other park additions should always include community participation. The level and intensity of community outreach and engagement may differ based on project type, ranging from written notifications, to community meetings and workshops, to design charrettes. Outreach and engagement efforts should start at the initial project stage, which provides the opportunity to learn about the local community's recreation and open space needs, and continue throughout the project. The City should strive to actively engage community members throughout the process by using a variety of community engagement tools.

A diversity of recreation programs is typically needed to serve the recreation needs and interests of San Franciscans. The City should consider many tools and criteria when developing recreation programs. Some useful tools include but are not limited to:

1. the City Survey from the Controller's Office, which provides an overview of park usage, park quality, and park programming from residents;
2. intercept surveys, which provides observational park usage;
3. user surveys from recreation programming participants;
4. facility-based input to provide neighborhood feedback on recreation programming; and,
5. emerging technologies that survey existing and potential park users including residents, workers, and visitors.

Connecting with and engaging the community will expand opportunities to honor community heritage, facilitate participation in broader arts and cultural activities, and ensure that facilities and programs are appropriate for park users and reflect community character.

Community representation can be continued as the park evolves by including plans that promote volunteer projects derived from the interest and abilities of the community, under the direction of park staff.

POLICY 5.2
Increase awareness of the City's open space system.

San Francisco's open spaces offer residents, visitors and workers many opportunities for recreating and relaxing. The enormous variety of spaces offers a range of options for the user, from a small plaza where downtown workers sit to enjoy their lunch, to large parks where hikers can walk through a redwood grove, to the numerous classes and programs offered by the Recreation and Park Department for families.

The City should coordinate efforts to increase awareness of all City-owned open spaces and promote an increased use and activation of underutilized spaces, which are often underused simply because people are unaware of all the amenities offered. The Recreation and Park Department should continue to enhance its presence on the internet, social media, and emerging technology. All City agencies owning public open spaces should also use emerging technologies to increase awareness of public open spaces. Ideally, the City should create a holistic platform that includes information (hours of operation, permitted activities, community stewardship opportunities, etc.) on all publicly-owned parks and open spaces regardless of the owning agency.

Open spaces also provide an opportunity to increase public understanding of and appreciation for San Francisco's unique natural heritage. Larger open spaces, such as natural areas and parks, as well as smaller landscaped areas, such as POPOS and street parks, may present opportunities to build awareness and understanding of ecology and the natural world through design elements such as demonstration gardens, educational signage, and interpretive artwork. The City should continue to explore creative partnerships with community groups, educational institutions, and cultural organizations to expand environmental education programs and provide opportunities for community-based stewardship and conservation. Such programs should target youth and high-needs areas in particular.

POLICY 5.3
Facilitate the development of community-initiated or supported open spaces.

Publicly-owned and managed open spaces, such as those managed by the SFRPD, are only one component of the City's open space network. Informal, community-organized open spaces, such as community gardens, green opportunities on street corners or along undeveloped street right-of-ways, and opportunities on private or underutilized (vacant) property, provide great opportunities for recreation and open space.

Community organizing around engaged urban revitalization, such as the creation of parks and open space, can have tangible social benefits too. It fosters a sense of responsibility, and encourages residents to take initiative in affecting their own environment. Creation of a community space can support the coming together of a neighborhood, facilitating social interactions and further increasing participation in future planning efforts.

The City should look for opportunities to expand the development of street parks, urban plazas, community gardens, improved streets, and shared school playfields (as described in Objective 3). An evaluation of public property potential, vacant and underutilized properties, and even private property where agreements with owners could be facilitated, would aid in identifying open space opportunities. While gaining access to private property is often a challenge, as owners may want to preserve development potential in the future, it may be possible to structure conditions that allow for temporary use as open space. A formal authorization agreement between the property owner, City, and community could regulate limited-term public use, allowing vacant private properties to serve as a positive community asset without detriment to existing or future building rights.

The City should support community-initiated efforts both administratively and financially by promoting and expanding programs like the Community Challenge Grants and Community Opportunity Fund. The City should also broaden communities' awareness of ways to develop or improve their own neighborhood spaces, the need for open space, and opportunities for them to respond to such needs. Education programs, which can be held in schools, within nonprofit programs, or even as seminars at neighborhood organizations, allow residents to tap into strategies for designating, financing and developing urban open space.

Various nonprofit organizations already provide technical assistance and support, broadening knowledge about what communities can do; organizing seminars, which aid community groups in understanding how to get a project started; providing planting lists and advice on their websites; and holding volunteer days to help implement work. Communities may also have physical needs for maintenance support and tools. Tool lending libraries that assist park volunteers in cleanups, landscape improvements, and community tree plantings, all help support the development of open space and should be supported.

POLICY 5.4
Reduce governmental barriers to community-initiated recreation and open space efforts.

The high cost of permitting requirements, combined with the time to complete them, can be a significant disincentive to community efforts. Recognizing this, San Francisco's street regulating agencies have streamlined permitting processes for street landscaping and reduced fee requirements. However, significant hurdles still exist to creating major changes to properties or to the public right-of-way. Because of the potential for conflicts with parking, traffic, transit, and adjacent uses, it is difficult to streamline major improvement processes. Yet, Portland has established a model ordinance, the "Intersection Repair" ordinance, which was intended to facilitate neighborhood improvements to streets, including major interventions like developing public gathering places in a street intersection. The City should study how to improve the delivery of public street improvements, and examine the lessons from places like Portland to examine what aspects can be facilitated.

Liability is another barrier. In San Francisco, improvements that convert private property to publicly accessible, or even private improvements to public property, typically require that the party contributing the improvements indemnify the City of all liability, which can bring the additional financial burden of insurance. The City needs to make a concerted effort to limit such liability concerns, and balance good public policy with legal caution. In particular, the City should pursue legislation to address the issue of public liability in situations of joint use or joint development of public properties, so that the liability may be equitably shared by multiple agencies (such as the agreement between the SFUSD and the Recreation and Park Department to allow public access to some schoolyards).

POLICY 5.5
Encourage and foster stewardship of open spaces through well-run, active volunteer programs.

Individual participation in stewardship of public open spaces brings obvious improvements to our parks – greener plantings, better maintenance, and an overall feeling of ownership which can deter destructive behavior. Stewardship activities also provide benefits for the individuals by encouraging appreciation of the space, stimulating more outdoor activity, and promoting long-term civic engagement.

The SFRPD has a wide-ranging volunteer program which creates opportunities to participate in gardening and ecological restoration projects, recreational programming, park planning, and fundraising. The program also fosters group sponsorship through weekly, ongoing work parties that provide ongoing stewardship of a park or area.

The Department of Public Works runs a number of parallel programs, such as Adopt A Street, Streets Park Program, and the Community Clean Team, to facilitate neighborhood stewardship efforts on San Francisco's streets, parks and schools.

The Port has also developed successful partnerships with organizations (like Literacy for Environmental Justice to assist with maintenance and education at Heron's Head Park), and Kayaks Unlimited (for stewardship of Islais Landing).

But more resources are necessary to realize the full potential of volunteer programs, expanding the breadth and depth of volunteer opportunities as well as overall participation rates. The City should work to expand these partnerships for stewardship of parks and open spaces, and could help coordinate all volunteer opportunities – whether City or nonprofit sponsored – into an online, easy-to-access calendar, or create a volunteer database with up-to-date schedules and opportunities. The City should also explore ways to share ongoing maintenance of parks and open spaces with individual stewardship organizations or through inter-departmental coordination.

OBJECTIVE 6

SECURE LONG-TERM RESOURCES AND MANAGEMENT FOR OPEN SPACE ACQUISITION, AND RENOVATION, OPERATIONS, AND MAINTENANCE OF RECREATIONAL FACILITIES AND OPEN SPACE

Securing resources for the maintenance and renovation of existing open spaces and providing funding for the acquisition of new open spaces has been a challenge for the City. The City must recognize the costs associated with open space maintenance, renovation, and acquisition and ensure that their funding mechanisms address these major expenditures.

POLICY 6.1
Pursue and develop innovative long-term funding mechanisms for maintenance, operation, renovation and acquisition of open space and recreation.

One of the key goals of this Plan is to ensure that the policies and programs have adequate resources and that a consistent source of funding for operations and maintenance is secured. The City has the responsibility to provide necessary funding for well-maintained recreational facilities and open space. To overcome the challenge of the City's diminishing resources and increasing costs and in order to meet existing funding challenges, the City should pursue different innovative financing mechanisms.. These strategies should help the City realize the monetary benefits provided by parks and open space and invest those benefits into the park system. The City should continue to pursue sustainable mechanisms to overcome the funding challenges. Below is a list of different mechanisms commonly used in cities as public finance strategies for parks and open spaces. Many of these funding strategies have been already used in San Francisco. The City should evaluate these mechanisms and their effectiveness on an on-going basis.

- **General Obligation bonds:** RPD has been using general obligation bonds as a long-term capital planning strategy. These bonds focus on the basic, critical needs of the park system, reducing earthquake safety risks and renovating rundown parks, pools, recreation centers, and playgrounds. In order to ensure that each bond efficiently addresses the needs of communities, RPD should continue to assess the results of each bond and their cost-efficiency in order to enhance the structure, process, and efficiency of future bonds.

- **Public-private partnerships:** The City has used public private partnerships since the park system was founded. Support from private entities and individuals can enable the park system to provide services and recreation opportunities to San Franciscans. The City is continuing to develop public-private partnerships to increase open space amenities and funding opportunities. Such facilities can range from mobile food vendors to larger concessions operating in park facilities. Such opportunities can provide a

reliable source of funding for park improvements and maintenance, while ensuring that they benefit park users, address their needs and concerns, and protect the public interest. Responsible agencies should develop these opportunities through an appropriate outreach and engagement process as outlined in Objective 5. Additionally, these agreements should:

  - Maintain and enhance public access to recreation and park services; and
  - Maintain transparency and accountability to the public; and
  - Support the park or open space through financial and/or physical improvements

- **Grants:** Granting agencies such as federal and state agencies and foundations provide innumerable financial help and support to the city. The city agencies should continue to proactively pursue grant opportunities.
- **Local Fundraising:** The City's vast network for park groups and active community organizations provide a wealth of knowledge and resources that can help support the city's open spaces. The City Budget should prioritize adequate resources and consistent funding source for operating and maintaining open space.
- **Citywide Impact Fees to Fund Recreation Facilities and Open Space.** Development impact fees are fees the City charges developers in connection with approval of a development project for the purpose of defraying all or a portion of new public facility needs related to the development. These fees can be used to acquire and develop new recreational facilities and open spaces and for capital improvements to existing open spaces. Development impact fees that provide revenue for recreation and open space are in effect in a number of City neighborhoods, but not citywide. The City has developed an initial nexus study to demonstrate the impact of new development on open space.
- **Park Improvement Districts.** An innovative approach, similar to the Community Benefits District (CBD) used in many of San Francisco's neighborhood commercial districts, is a Park Improvement District. A Park Improvement District is a public-private partnership in which businesses and/or residents in a defined area elect to pay an additional tax in order to fund improvements and maintenance for the park. The parks are maintained by the City, but this additional funding provides supplemental funds to cover needed improvements and maintenance overseen by a neighborhood-elected board of directors. This concept could be piloted to determine its effectiveness.
- **Voluntary Contributions.** Many cities provide the option to voluntarily contribute a small amount of money specifically earmarked for open space. Such a contribution option would be added to residents' utility bills to fund improvements to open space.
- **Tax Revenue Options.** In some cities, decision makers have pursued the option of an additional tax contribution earmarked for open space, usually via an additional property tax on residential and/or commercial owners. The creation of a new tax requires a two-thirds majority vote by the electorate and provides a consistent source of funding. The money can be used for acquisition, maintenance, or capital improvements.
- **Community Facilities Districts.** In Mission Bay and Hunters Point Shipyard, Community Facilities Districts (or CFD), or special tax districts, will be used to help fund the on-going maintenance of the new open space facilities. The South Beach area also has a CFD that helps fund the maintenance of some small public plazas.

RPD and other public agencies responsible for recreation and open space in the City should continue analyzing how such funding options could be applied in San Francisco for recreation and open space maintenance, operations, renovation and acquisitions.

2014 Recreation & Open Space Element adopted by the Board of Supervisors Ordinance 0153-14 on 07/15/2014.

Amendments by Board of Supervisors Ordinance 0023-15 adopted on 02/10/2015.

Amendments by Board of Supervisors Ordinance 0020-17 adopted on 01/31/2017.

Amendments by Board of Supervisors Ordinance 0019-17 adopted on 01/31/2017.

Amendments by Board of Supervisors Ordinance 0274-18 adopted on 11/13/2018.

Amendments by Board of Supervisors Ordinance 0064-20 adopted on 04/21/2020.

Amendments by Board of Supervisors Ordinance 0143-20 adopted on 08/18/2020.

Amendments by Board of Supervisors Ordinance 0155-23 adopted on 07/25/2023.

EXHIBIT 5

Safety & Resilience Element

NOTE: This **2022 Safety and Resilience Element** was adopted by the San Francisco Board of Supervisors on December 13, 2022. This Element update replaces the previous 2012 Community Safety Element.

INTRODUCTION

Purpose

The purpose of the Safety & Resilience Element is to facilitate safety from hazards, achieve racial and social equity, and strengthen community resilience. It provides a comprehensive set of policies for minimizing San Francisco's contribution to climate change (or "the climate crisis") and ensuring local resilience to multiple hazards. The policies here seek to protect the people and assets in San Francisco from loss of life, injury, property loss, environmental damage, and social and economic disruption from natural or technological disasters. The City has a profound obligation to protect communities and areas that face higher vulnerability to disasters.

The Safety & Resilience Element focuses on all hazards: natural and human-made. There is a strong foundation addressing seismic hazards, as earthquakes are the greatest risk to life and property in San Francisco due to the San Andreas and Hayward Faults. There are numerous other hazards prone to occur in San Francisco, such as flooding and poor air quality. Additionally, there are human-made hazards that pose threats to the City's health and welfare and must be considered alongside natural hazards for mitigation, preparedness, response, and recovery, such as pandemic and release of hazardous materials. Due to the climate crisis, hazards are occurring more frequently, intensely, and simultaneously. The Safety & Resilience Element aims to address the complexity and severity of all hazards.

The Safety & Resilience Element names Environmental Justice Communities as areas in San Francisco disproportionately experiencing environmental burdens. Environmental Justice Communities, and others, tend to experience hazards more frequently and more intensely as compared to the City as a whole, and they take longer to recover. The Environmental Justice Communities Map identifies communities based on exposure to environmental pollution and other social vulnerabilities, which are often low-income communities and communities of color. Similarly, the Safety & Resilience Element names the American Indian community, the Black community, and other communities of color who are disproportionately experiencing racial and social inequities. The policies also name vulnerable communities with heightened risk and increased sensitivity to potential harms than the City average. The Safety & Resilience Element seeks to eliminate disparities and burdens related to all hazards and the climate crisis for all San Franciscans, starting with Environmental Justice Communities and other vulnerable people. When named, the Safety & Resilience Element is indicating the geographic areas (Environmental Justice Communities) and/or dispersed communities (American Indian community, the Black community, and other communities of color, and other vulnerable communities) in the City where policies should begin and target their work. In doing so, the Safety & Resilience Element offers policies to achieve racial and social equity, through actions and other systemic changes that amend past injustices and enable proactive, community-led solutions for the future.

In brief, the Safety & Resilience Element is organized into six goals to achieve racial and social equity, environmental justice, and climate resilience.

1. **All People Live in Safe & Healthy Communities:** To ensure equitable safety, San Francisco must remedy past injustices and eliminate environmental burdens for all San Franciscans, starting with those experienced by Environmental Justice Communities.
2. **Multi-Benefit Climate and Hazard Resilience:** Pursue multi-hazard risk reduction strategies and maximize community benefits along the way to becoming a net-zero emissions City by 2040.
3. **Hazard Mitigation:** The City must reduce the likelihood, scale, and severity of impacts from all disasters to the economy; the built and natural environment; and all communities, starting with reducing such impacts in Environmental Justice Communities.
4. **Emergency Preparedness:** Ensure San Francisco residents, workers, and visitors have the knowledge, capacity, and government support needed to be safe in the face of disasters.
5. **Response:** Provide San Francisco residents, workers, and visitors with the essential support and services needed immediately following a disaster for life safety and functional recovery.
6. **Recovery and Reconstruction:** Rebuild San Francisco's built, natural, and social assets and communities towards a more equitable and resilient future.

Implementation

The Safety & Resilience Element establishes policies to guide the City's actions in preparation for, response to, and recovery from a major disaster. As a policy document, the Safety & Resilience Element guides city decision making and actions, such as funding programs and regulating development. Implementation of the Safety & Resilience Element is carried out through numerous City plans and programs, as well as actions by the private sector and development.

Notably, there are multi-agency efforts to coordinate climate mitigation and adaptation and ensure San Francisco becomes more resilient to the threats of the climate crisis. Mayor London N. Breed officially launched ClimateSF in 2021, led by the Mayor's Office and the Office of Resilience and Capital Planning, Planning Department, Department of the Environment, Port of San Francisco, and the San Francisco Public Utilities Commission. ClimateSF establishes goals for collective action on climate resilience planning, policy, and guidance across the City. This coordination supports a central focus on racial and social equity, healthy communities, just transition, connection to nature, and innovation. Through ClimateSF, major components of the Safety & Resilience Element are implemented.

RELATIONSHIP TO CITY-LED ACTION PLANS AND PROGRAMS

The Safety & Resilience Element contains broader policies to reduce impacts that will need to be carried out by the City. The City maintains three principal implementation plans that provide more immediate directions, specific strategies, and measurable objectives for monitoring and evaluation: the Hazards and Climate Resilience Plan, Climate Action Plan, and Emergency Response Plan. These plans work in partnership with the Safety & Resilience Element and are incorporated by reference here. A fourth plan, a Recovery Plan, is planned to be produced by the City to facilitate healthy and equitable recovery after disaster.

- The *Hazards and Climate Resilience Plan* (HCR), led by the Office of Resilience and Capital Planning and adopted by the Board of Supervisors, is a climate adaptation plan that responds to all hazards. The HCR serves as the City's local hazard mitigation plan for disasters, adopted by the Federal Emergency Management Agency (FEMA). It is the City's blueprint to understand and prepare for the impacts of natural hazards and climate change on our people and our assets.

- The *Climate Action Plan* (CAP), released by the Mayor and Department of the Environment, was originally developed to reduce the City's greenhouse gas emissions. Achieving net-zero greenhouse gas (GHG) emissions by 2040 is still a plan driver; the plan now acknowledges the interwoven social and racial inequities of the climate crisis. Accordingly, the CAP advances measurable strategies to achieve net-zero emissions while addressing racial and social equity, public health, a just economy, and community resilience.

- The *Emergency Response Plan* (ERP), led by the Department of Emergency Management, provides an immediate action plan to coordinate response to disaster. It includes an overview of the emergency management system, detailed and restricted information for the Emergency Command Center, and a set of functional and hazard-specific details. The COVID-19 Phases I and II After Action Report outlined the strengths of the City's plans and suggested further updates to enhance the City's Emergency Response Plan. The suggested improvements include increasing community equity, improving the City's Disaster Service Worker program, and providing further clarity and streamlining to both the organization of response services and procurement of emergency supplies.

- A *Recovery Plan* is planned to be produced by the Office of Resilience and Capital Planning. The City needs an advance planning document to guide long-term recovery and reconstruction post-disaster for all hazards that the City faces. A recovery plan can support rebuilding the City in a way that is more equitable and resilient to future disaster, based on the latest citywide goals and values, community needs, and approaches for building back better.

There are many other plans and programs throughout the City that support the Safety & Resilience Element, such as the Community Action Plan for Seismic Safety, the Neighborhood Empowerment Network, the Neighborhood Emergency Response Team, and the Lifelines Council. In addition to City-led actions, the Safety & Resilience Element relies upon the private sector, community-based organizations, and a range of additional stakeholders to support full and robust implementation of these policies.

GOALS, OBJECTIVES & POLICIES

Goal 1. All People Live In Safe & Healthy Communities

All stages of hazard management—mitigation, preparedness, response, recovery and reconstruction—are too important and too big a task for City agencies to take on their own. It would also be ineffective and may cause further harm to do so in a vacuum, without the involvement of the people most affected by hazards. Residentsand community members themselves must play a central role in decision-making.

The planning process must develop an education-based involvement opportunities that supports community leadership development. Planning efforts should not only identify, but actively engage, the varied interests of the community. These processes should include holistic information around hazards and impacts; contribute to the vision for the City's future per the General Plan and community outreach and engagement; and support the achievement of racial and social equity. As possible, identify responsible agencies, institutions, and other partners responsible for implementing strategies for safety and resilience.

The City should also help to develop community skillsets pre-disaster, on both an individual and neighborhood level, to empower community members to meaningfully participate in a post-disaster reconstruction planning process, work effectively together to identify and prioritize community needs, and work collaboratively with the City to communicate these needs and ensure that they are met. Programs such as the Neighborhood Empowerment Network (NEN) help to build community capacity and develop these essential skills before disaster strikes, so that everyone can participate effectively in the reconstruction process after the disaster.

OBJECTIVE 1.1.

JUST EMPOWERMENT. SUPPORT THE GROWTH OF COMMUNITY NETWORKS TO EMPOWER ALL PEOPLE.

POLICY 1.1.1.

Engage the community in the planning process.

Knowledge about geologic risks in the Bay Area is substantial, but always evolving. The City needs to keep informed, through the professional contacts of its staff, and through State and federal agencies like CalEMA and the United States Geological Survey, about advances in the field. New information will be shared with the public and decision-makers.

Similarly, new techniques are continually developing in the seismic design of structures, and new data is emerging about the actual seismic performance of previously retrofitted buildings. The risks of damage to life and property can be reduced by these improved engineering practices. The City should continue to support the institutions, professional organizations and individuals who carry out research in structural safety. Special attention should also be paid to support and seek out research that identifies innovative and low-cost retrofit concepts. Once the City sets new acceptable safety levels, this research should support the engineering requirements to meet safety levels.

POLICY 1.1.2.

During climate mitigation activities, prioritize investment and resources in Environmental Justice Communities, especially through existing community-based efforts.

During climate mitigation activities, the goal is to support the City become a net-zero emissions City by 2040 by reducing the amount and rate of greenhouse gas emissions. For many mitigation approaches, such as utilizing low-carbon transportation modes and electrifying buildings, it takes investment and resources to make these shifts in behavior at the individual and community level. Environmental Justice Communities and other vulnerable people should benefit from targeted investment and resources to make these changes. By prioritizing investment and resources into these communities, financial responsibility for climate action is shifted away from the people most adversely impacted by the climate crises. During project design and planning, specify how the scope, outreach, implementation, and budget serves the needs of these communities to mitigate their contributions to greenhouse gas emissions. In addition to reducing the amount and rate of greenhouse gas emissions, there can be additional community benefits in public health, local businesses, and quality of life. There can be opportunities to partner with existing community-based organizations and neighborhood-level efforts to effectively reach Environmental Justice Communities and other vulnerable people.

POLICY 1.1.3.

During emergency preparedness activities, inform all individuals about the risks, vulnerabilities, and consequences of their neighborhood and communities from all hazards through culturally competent and equitable communications.

Everyone should be equipped with the public awareness of how all hazards may affect the City, the potential impact on their lives, and what to do to exercise their resilience. The City must support widespread, current, and actionable public awareness activities for robust emergency preparedness. With greater awareness, the less likelihood of loss of life and harm and the more likelihood that people are safe and able to bounce back after disaster. As hazards are felt disproportionately across the City, it is vital that this information be made in culturally competent methods and equitably distributed to communities that are hard to reach, such as linguistically isolated

communities and communities across the digital divide. As part of racial and social equity assessments and vulnerability and consequences assessments, the City can support a centralized repository of hazards information, directories to resources and training, and accessible, neighborhood-level information. The City can support conducting research and training materials, distribution across culturally competent and mass communications streams, and identify resources that can activate readily in the event of a disaster.

POLICY 1.1.4.
Establish a network of staff supporting the Equity Officer to advocate and advise on equitable response, recovery, and reconstruction activities during and after a disaster.

In the Incident Command System (ICS) of the Emergency Operations Center (EOC), there is an Equity Officer responsible for incorporating equity, inclusion, and community needs into emergency response. The Equity Officer is built into the emergency response structure that will help reach all parts of the City in the event of a disaster. Based on lessons learned from the COVID-19 After Action Report for Phase I and Phase II, there is a strong need and opportunity to establish a network of staff during emergency response that have built trust with communities and neighborhoods.

This network of staff can serve as experts of neighborhood-specific and potentially block-level conditions, liaisons to community-based organizations and other stakeholders, and trusted messengers to vulnerable people. The staff should represent and work strongly with the American Indian, Black, and other communities of color and other vulnerable people. During all EOC activations, this network would coordinate to equitably implement response, recovery, and reconstruction activities. This network may have memorandums of understanding with key agencies and community stakeholders to support their integration into emergency management best practices.

POLICY 1.1.5.
During response activities, the City should partner with non-governmental entities to respond to hazard impacts in Environmental Justice Communities.

Partnerships with non-governmental entities can be critical to respond to the widespread impacts of a disaster. In the immediate aftermath of a disaster, these partnerships will facilitate the “all hands on deck” response to prevent further loss of life and ensure the City recovers more equitably and resiliently.

By laying the groundwork necessary for strong public-private partnerships in advance—by establishing relationships with universities, corporations, and foundations—the City can put itself in a strong position to receive support outside of regional, state, and federal aid, which could be critical if disaster is widespread and government resources must be extended. The City can activate public-private partnerships and partnerships with community-based organizations as a strong tool in revitalization after a community disaster.

Relationships with corporate entities, particularly those with local ties, can lead to financial and other support in reconstruction and restoration efforts. Relationships with community-based organizations and other neighborhood-level efforts can lead to increased outreach to people who are in need of support. Their local knowledge can support distribution of resources and programs, identify neighborhood-level or block-level challenges, and serve as trusted messengers of key information.

POLICY 1.1.6.
During recovery and reconstruction activities, rebuild in ways that remedy safety and resilience injustices in Environmental Justice Communities.

The City’s response efforts can be made stronger with robust partnership with its neighborhoods. Neighborhoods can be a driving force in recovery efforts. Residents, leaders, and community members understand the lived experiences and priorities of their neighbors, and they have more personal motivation to ensure projects and programs are carried out successfully. Often a lynchpin for rebuilding, preexisting community efforts and community-based organizations can readily provide a strong local force to extend the reach of government-provided recovery and reconstruction.

In recognition of neighborhoods’ critical role in recovery, the City should work to increase the capacity of neighborhoods and neighborhood groups. The City currently maintains a number of programs, such as Neighborhood Emergency Response Team (NERT) and the Neighborhood Empowerment Network (NEN), that empower community members and community-based efforts to participate in climate mitigation and disaster recovery efforts.

These programs should be viewed as part of developing a framework of efforts to prepare communities in advance of a disaster. This framework should encompass community outreach and the provision of information; emergency preparedness exercises such as mapping and planning; and other problem-solving activities to tackle the range of potential hazards. By building the capacity of neighborhoods pre-disaster, neighborhoods are more capable to support post-disaster decision-making around issues such as land use, transportation, and economic development.

The City should expand opportunities for community members to organize at a neighborhood- or block-level to facilitate strong social ties that serve in resilient recovery and reconstruction activities. Identify incentives to convene, share resources and tools, and identify community-level leadership development.

OBJECTIVE 1.2.

CONTINUOUS ASSESSMENT AND EVOLUTION. ACT BASED UPON BEST PRACTICES AND CONTINUOUSLY IMPROVE THE KNOWLEDGE BASE TO REMEDY PAST INJUSTICES AND ELIMINATE DISPARITIES.

POLICY 1.2.1.
In all stages of safety and resilience, prioritize the needs of people most impacted by the adverse impacts of hazards.

People are the most precious part of cities. As hazards occur, the adverse impacts are felt unevenly throughout the City. There are people who have higher vulnerability to hazard consequences and take longer to recover. Due to systemic inequities, there are people who are more likely to experience a hazard first and worst, and take longer to recover, than the City overall.

In order to support Environmental Justice Communities and other vulnerable people, the City must identify and prioritize the needs of people most impacted by hazards in all safety and resilience efforts. The City must increase baseline understanding of disproportionate inequities (causes), impacts (effects), and opportunities to increase safety and resilience (solutions). The City must continuously update this understanding by identifying critical needs and infrastructure, conducting racial and social equity assessments, conducting outreach and engagement activities, and incorporating racial and social equity indicators into the evaluation and monitoring of programs.

POLICY 1.2.2.
Use the latest assessment tools provided by the Office of Racial Equity and Department Racial & Social Equity Action Plans to center racial and social equity into the planning, evaluation, and monitoring of programs.

In City efforts for safety and resilience, racial and social equity must be incorporated into the planning, evaluation, and monitoring of all programs. For applicable programs, perform racial and social equity assessments and the latest tools provided by the respective agency's Racial & Social Equity Action Plan and the Office of Racial Equity. These tools provide high-level guidance to understanding and centering racial and social equity into projects and programs. The tools require consideration at each step of the decision-making process, as to who would benefit or be harmed by a certain action, and by iteratively considering these questions to generate better results.

POLICY 1.2.3.
Prioritize documentation of historic, archaeological, and intangible cultural resources in the most vulnerable areas to the climate crisis, starting in Environmental Justice Communities.

San Francisco's historic and cultural resources are critical to the City's identity. They contribute to the City's unique character, support heritage tourism and economic development, and hold stories of the diverse communities who have called San Francisco their home. The City must continuously understand and preserve these resources and offer reasonable protection from current and future hazards. The City should prioritize documentation of historic, archaeological, and intangible cultural resources in areas most vulnerable to the climate crisis, such as areas within the Sea Level Rise Vulnerability Zone, as these resources may be experience irreparable damage or be completely lost.

Efforts are underway to document, preserve, and protect these assets, including resources that may become inundated by sea level rise or may collapse from an earthquake. However, the timing, severity, and impact of hazards such as earthquakes, floods, and fires are not fully understood. Hazards could severely damage or completely destroy buildings, building features, or artifacts within buildings.

Having a comprehensive cultural resource survey is critical for both hazard risk assessment and post-disaster recovery. The San Francisco Citywide Cultural Resources Survey identifies important individual historic or cultural resources and potential districts throughout the City. Additionally, the City can employ tools such as photographs, architectural drawings, oral histories with community knowledge and culture bearers, 3D laser surveys, and/or digital technology to archive and research these resources. The City can also explore the latest approaches to documenting these resources, as more is learned about preservation and adaptation from hazards such as poor and hazardous air quality and extreme storms.

POLICY 1.2.4.
Prioritize funding for infrastructure maintenance and improvements in Environmental Justice Communities.

Environmental Justice Communities and other vulnerable people often rely more heavily on critical pieces of City infrastructure than communities with more resources, higher quality options, and privilege. Infrastructure provides public services such as transportation, water, energy, and internet. These infrastructure assets and systems are essential for people living, working, and playing in the City. It is important to fund the operation, maintenance, and improvements of such infrastructure and prioritize the needs of the communities who are more reliant on their services.

Goal 2. Multi-Benefit Climate and Hazard Resilience

Pursue multi-hazard risk reduction strategies and maximize community benefits along the way to becoming a net-zero emissions City by 2040.

OBJECTIVE 2.1.

CLIMATE RESILIENCE. **PURSUE SYNERGISTIC EFFORTS THAT BOTH ELIMINATE GREENHOUSE GASES (CLIMATE MITIGATION) AND PROTECT PEOPLE, THE BUILT ENVIRONMENT, AND NATURE FROM THE UNAVOIDABLE IMPACTS OF THE CLIMATE CRISIS (CLIMATE ADAPTATION).**

POLICY 2.1.1.
Coordinate the regular update of implementing documents of this General Plan including: the Hazards and Climate Resilience Plan (HCR) and the Climate Action Plan (CAP), both incorporated by reference here, as well as the Emergency Response Plan (ERP) and the Recovery Plan (pending).

The Hazards and Climate Resilience Plan (HCR), incorporated by reference here, serves as the City's local hazard mitigation plan to the Federal Emergency Management Agency (FEMA). It addresses all hazards the City is at risk to and strategies to mitigate from harm. It serves as a tracking and monitoring tool, with annual reporting to FEMA. The Climate Action Plan (CAP), incorporated by reference here, guides how the City can reduce greenhouse gas emissions to net-zero by 2040, building on the City's climate and sustainability framework, "0-80-100-Roots." This framework aims for zero waste, 80% of trips taken by low-carbon transportation modes, 100% renewable energy, and carbon sequestration. The Emergency Response Plan (ERP) provides an immediate action plan to coordinate response to disaster. It includes an overview of the emergency management system, detailed and restricted information for the Emergency Command Center, and a set of functional and hazard-specific details.

The Recovery Plan is planned to be produced by the City. The Recovery Plan can serve as the advance planning document to guide long-term recovery and reconstruction post-disaster for all hazards that the City faces.

These documents should be coordinated and be regularly updated to ensure the City is best positioned to equitably protect people from all hazards and the climate crisis.

POLICY 2.1.2.
Direct City actions to reduce local contributions towards the climate crisis by mitigating greenhouse gasses and by increasing carbon sequestration.

Globally, scientific consensus on the threats of climate change and the current climate crisis has been widely agreed upon for many years. The climate crisis increases the frequency of natural disasters and threatens life and wellbeing, the economy, and more. In 2019, the City declared a climate emergency and strengthened plans for net-zero greenhouse gas emissions.

According to the 2022 Intergovernmental Panel on Climate Change Sixth Assessment Report, human-induced global heating is causing dangerous and widespread disruption in nature and affecting the lives of billions of people around the world, despite efforts to reduce the risks. Multiple climate hazards will occur simultaneously, and multiple climatic and non-climatic risks will interact, resulting in compounding the overall risks cascading across sectors and regions. For example, increased heatwaves, droughts, and floods are already exceeding the tolerance thresholds of plants and animals, driving mass mortalities in species such as trees and corals. These weather extremes are occurring simultaneously, causing cascading impacts that are increasingly difficult to manage. They have exposed millions of people to acute food and water insecurity, especially in Africa, Asia, Central and South America, on Small Islands, and in the Arctic.

To avoid mounting loss of life, biodiversity, and infrastructure, ambitious and accelerated climate adaptation is required, at the same time as making rapid, deep cuts in greenhouse gas emissions. So far, adaptation progress is uneven and there are increasing gaps between action taken and what is needed to deal with the increasing risks, the new report finds. These gaps are largest among lower-income populations.

The United Nations Intergovernmental Panel on Climate Change reported a dire warning about the consequences of inaction on the climate crisis, that due to human-induced global heating, the world "faces unavoidable multiple climate hazards" over the next two decades with global warming of 2.7°F (1.5°C). San Francisco has committed to local action to limit further warming through a goal of net-zero sector-based emissions by 2040, a 90% reduction from 1990 levels, and an interim target of cutting sector-based emissions 61% below 1990 levels by 2030.

The Climate Action Plan describes the strategies necessary to reach emissions reductions goals by sector:

- **Zero Waste:** By 2030, reduce solid waste generation by at least 15% below 2015 levels, and reduce solid waste disposed of by incineration or deposit in landfill by at least 50% below 2015 levels.
- **Transportation:** By 2030, increase low-carbon trips to at least 80% of all trips measured, and increase electrification of vehicles to at least 25% of all private vehicles registered. By 2040, in-crease electrification of vehicles to 100% of all private vehicles registered.
- **Energy:** By 2025, supply 100% renewable electricity, and by 2040, supply 100% renewable energy.
- **Housing:** Build at least 5,000 new housing units per year with maximum affordability, including not less than 30% affordable units, with an emphasis on retaining and rehabilitating existing housing.
- **Buildings:** By 2021, require zero onsite fossil fuel emissions from all new buildings, and by 2035, require zero onsite fossil fuel emissions from all large existing commercial buildings.
- **Roots:** Sequester carbon through ecosystem restoration, including increased urban tree canopy, green infrastructure, and compost application.

POLICY 2.1.3.
The City shall create and implement a Recovery Plan to facilitate robust social, economic, and environmental recovery post-disaster.

The experiences of New Orleans, Louisiana and the Gulf after Hurricane Katrina in 2005 illustrate the need for local jurisdictions to perform advance planning. Before a disaster strikes, there may be more resources within the community and within local government available. While the specifics of recovery would vary depending on hazards and impacts, certain aspects of recovery can be facilitated by advance planning.

The Association for Bay Area Governments produced a model recovery plan for the City of Oakland. A local recovery plan for the City should be centered in racial and social equity and should include, but not be limited to, the following topics discussed in Oakland's plan: financing recovery issues; recovery of government facilities and services; land use change; and the long-term recovery of housing, business, health care, schools, utilities, and transportation.

POLICY 2.1.4.
Ensure that City projects and private developments provide multi-benefit solutions that mitigate hazard risk and contribute to a zero-emission future.

With limited resources and capacity, it becomes more important that large development projects provide as much comprehensive benefit to the community as possible. The climate crisis is worsening conditions on the ground, and hazards are occurring more frequently, intensely, and simultaneously. A development project must consider a broad set of hazards and prepare holistically for the project's climate resilience, while actively reducing greenhouse gas emissions to contribute to Climate Action Plan targets and goals. Options for projects to reduce emissions include carbon sequestration through urban greening and native planting, building electrification, and connection to renewable energy.

OBJECTIVE 2.2.

MULTI-HAZARD RESILIENCE AND CO-BENEFITS. IN ADAPTATION AND MITIGATION INVESTMENTS TO MULTIPLE AND SIMULTANEOUS HAZARDS, MAXIMIZE RISK REDUCTION STRATEGIES AND THE RELATED COMMUNITY BENEFITS.

POLICY 2.2.1.
Include multi-hazard risk assessments in private development, capital projects, and the City's climate resilience programs.

With limited resources, and the worsening effects of the climate crisis, the City must extend the reach of every dollar spent on climate adaptation. The City must evolve the approach to climate adaptation and address how hazards are occurring more frequently, intensely, and simultaneously. In the project design and planning, incorporate how projects can deliver on a broad set of values and goals of the City.

With multi-hazard risk assessments, programs and projects need to consider the near- and long-term risks of all hazards. ClimateSF, the City's coordinated climate resilience interagency group, can support connecting climate resilience to intersecting issues across housing, health, transportation, and other public benefits. The General Plan can also determine opportunities for projects to support public benefits.

In private development and capital projects, development plans should ensure new development is designed and constructed to ensure functional recovery—beyond life safety expectations—in the event of all hazards. For known hazard risks, such as liquefaction on landfill areas, development should seek a performance equivalent to that of similar structures built on firm ground. For development within the Air Pollution Exposure Zone (APEZ), the plan should provide as healthy indoor air as projects that are outside the APEZ.

The project teams should conduct outreach and engagement to assess and understand the complete set of hazards and associated vulnerabilities in a project geography, especially as they relate to environmental justice. The assessments should support expanding the impact of resources directed at a singular hazard to develop multi-benefit strategies and solutions for projects and communities. Work with stakeholders, community members, and the private sector to assess and understand the complete set of hazards and associated vulnerabilities in a major development's surrounding area.

POLICY 2.2.2.
Examine the risk of flooding and evaluate adaptation actions that will protect people and the built and natural environments to help inform land use, capital investment, and other policies.

Despite best efforts to reduce greenhouse gas emissions and mitigate against the climate crisis, current CO2 levels are already causing changes in weather patterns, more extreme weather events, and an increase in sea levels. Even if greenhouse gas emissions were halted today, the long half-life of many greenhouse gasses and the change in global ocean temperatures mean that we will be experiencing consequences of increased CO2 in the atmosphere for centuries.

There is potential for permanently inundated land to greatly increase from the climate risk and associated flooding from storm surges, increased participation, sea level rise, and groundwater rise. With worsening conditions and without adaptation action, flood hazards will expand and alter the current 100-year floodplain and Sea Level Rise Vulnerability Zone, making many more people and structures vulnerable than currently. The City should continue to review scientific emissions and sea level rise projections to become fully aware of risks to health, safety, and reliable functioning of City infrastructure systems due to flooding, as well as support the institutions, professional organizations and individuals who carry out climate research. In certain areas of the City, such as Environmental Justice Communities, neighborhoods may be affected by the intersection of increased flooding and increased exposure to toxic substances. There is ongoing research to explore how flooding, especially groundwater rise, affects the mobilization of toxic substances from contaminated soils, and the related public and environmental health impacts.

The risk of flooding needs to be taken into account when making land use decisions, bearing in mind that perceptions of acceptable risk may change in the future. These risks should also be incorporated into appropriate City plans and policies, such as the Planning and Zoning Codes, and capital planning. The Planning Commission, Board of Supervisors, and other City decision-making bodies should be fully apprised of these risks as they conduct reviews.

The City should review best practices, case studies, and current technology to mitigate these potentially harmful effects and adapt to future conditions that will reduce loss of life, build structures, and infrastructure. Adaptation actions should be considered for feasibility, and they should be incorporated into seismic upgrades and routine maintenance if possible. The adaptation strategies can include, but are not limited to: building elevation, floodproofing, green infrastructure and ecological/habitat features, hard engineering, zoning/code changes, and relocation of sensitive assets.

POLICY 2.2.3.
Seek sufficient funding to address climate hazards through all phases of mitigation, preparedness, response, recovery, and reconstruction.

Each phase of disaster planning (mitigation, preparedness, response, recovery, and reconstruction) requires their own planning, design and engineering, construction, maintenance and operations, and ongoing monitoring. Providing sufficient staff and budget resources for interagency coordination is no small feat. Further, equitable distribution of funding—considering historic disinvestment in certain communities—requires heightened consciousness to resource allocation and providing opportunities for community input and decision making.

The 10-Year Capital Plan provides an approach for long-term efforts to be balanced with immediate needs. The Capital Plan should prioritize funding for 1) Environmental Justice Communities for the specific threats they face being compounded by systemic inequities; 2) specific hazard threats poised in vulnerable areas; 3) areas and functions that serve the most people 4) projects with matching state and federal funding; and 5) investments that support achieving a state of good repair of existing infrastructure and assets. The traditional cost-benefit models to determine funding needs have been built around tax and economic revenue, which continues cycles of disinvestment in historically disadvantaged and disinvested areas. Instead, holistic cost-benefit models should consider social, economic, and environmental costs and benefits.

POLICY 2.2.4.
Adapt the City's bay and ocean shorelines to current and future climate flood hazards, including coastal flooding, sea level rise, groundwater rise, and extreme storms.

The City faces threats from the slow-moving disasters of sea level rise and flood hazards. Surrounded on three sides by water, the City must adapt the bay and ocean shorelines to these hazards to prevent inundation; spread of environmental pollutants; disrupted services of key assets such as utilities and underground rail; assets and property damage; and loss of open space, neighborhoods, and communities.

The City should develop adaptation strategies to address current and future hazards for the bay and ocean shorelines. Building off of the Sea Level Rise Action Plan, the City should develop a citywide adaptation plan that addresses the interaction between sea level rise, coastal and inland flood hazards, and extreme storms. The adaptation plan should include a model of these joint hazards and have neighborhood-specific analysis, especially in low-lying areas in the Sea Level Rise Vulnerability Zone, like Mission Creek, Islais Creek, and Yosemite Slough.

The adaptation strategies may use a combination of measures, including flood defenses, accommodation strategies such as floodproofing, elevating sensitive equipment, operational policies, and removal or relocation of sensitive assets. Flood defense measures should incorporate natural or ecological features as much as possible. Adaptation strategies should be reviewed and amended over time as conditions and flood projections evolve. They should build in redundancy to provide extra protection should flood defense structures fail.

OBJECTIVE 2.3.

NATURE-BASED SOLUTIONS. ENHANCE NATURE, BIODIVERSITY, AND PUBLIC OPEN SPACE THROUGH CLIMATE RESILIENCE STRATEGIES THAT MIMIC OR RESTORE ECOLOGICAL SYSTEMS AND FUNCTION.

POLICY 2.3.1.
Maximize the preservation and maintenance of carbon sinks and landscape approaches that advance the rate of carbon sequestration.

An essential element of becoming a net-zero emissions City is pursuing carbon sequestration, the capture and storage of greenhouse gas emissions. Trees, other flora, especially native plants, should be preserved, maintained, and increased as carbon sinks in the City. Native plants should be prioritized in pursuit of the City's carbon sequestration, water management, and biodiversity goals.

There are many City agencies involved in this work, such as Public Works, Recreation and Parks, Department of the Environment, the Public Utilities Commission, and the Port. Public Works has ongoing efforts to plant trees throughout the City that are sequestering carbon through tree photosynthesis. Recreation and Parks offers plant palettes to maximize climate resilience in park landscapes and engages in climate resilient land management by repurposing green waste as mulch and chip cover.

POLICY 2.3.2.
Prioritize nature-based solutions that restore ecosystem function and maximize ecological benefits to plants, animals, and people.

For climate resilience, nature-based solutions offer approaches to restore ecosystem function and maximize ecological benefits. In capital, development, and other projects, incorporate greening and plantings that are climate appropriate, non-invasive, and native species into the building and surrounding infrastructure. Where possible, design solutions that make ecosystem function visible so that relationships between people and nature can be understood, cultivated, and appreciated. For open space projects, it is important to coordinate with the American Indian and Alaska Native community to preserve existing culturally significant areas and ensure access to culturally significant practices, such as harvesting food from the area.

POLICY 2.3.3.
Prioritize nature-based solutions as flood adaptation strategies, to enhance shoreline biodiversity and ecological function, manage stormwater, and protect against sea level rise and coastal flooding.

Against the present and increasing threats of sea level rise and flood hazards, prioritize the use of nature-based solutions and green infrastructure to increase climate resilience. The unique characteristics of these water-related hazards present the opportunities for both site-specific and district-scale solutions to manage stormwater and protect against sea level rise and coastal flooding. For greater climate resilience, prioritize nature-based solutions that enhance ecological function, preserve the natural aspects of the shoreline, and reconnect people to these systems.

The nature-based solutions, such as wetlands, should be adapted to the condition of the shoreline. Where possible, consider soft landscape transitions to the bay, ocean, and creeks that maintain public access, especially visual access, to these water features. In areas with limited space for soft landscape transitions, consider vertical strategies such as living or ecological seawalls.

POLICY 2.3.4.
Reduce the threat of wildfire to San Francisco residents and infrastructure.

Though the probability of wildfires within San Francisco is low, it remains high for areas outside the county where City-owned infrastructure is located. Significant portions of the Hetch Hetchy Regional Water System in San Mateo, Alameda, Santa Clara, and Tuolumne Counties are located in very high fire hazard lands. Coordinate with Yosemite National Park, Stanislaus National Forest, CAL FIRE, and adjacent communities on risk reduction, and properly care for City-owned land and facilities to reduce wildfire risk.

A small portion of the Crocker Amazon neighborhood has been designated as a high fire hazard area by the State. There are potable water mains and hydrants along the perimeter of John McLaren Park, as well as a 2015 era 75,000 gallon Emergency Firefighting System cistern at the corner of Moscow and Geneva.

POLICY 2.3.5.
Educate and empower stakeholders and communities to know, grow, and steward local native plants and wildlife on private and public property.

Property owners and other stakeholders can take the lead in nature-based solutions and urban greening with more support from the City. The City should develop a centralized repository of information and training to increase public awareness of climate appropriate, non-invasive, and native plants and wildlife on private and public property. For public property and open space, it is important to ensure the American Indian and Alaska Native community have access to conduct cultural practices, such as harvesting.

Goal 3. Hazard Mitigation

The City must reduce the likelihood, scale, and severity of impacts from all disasters to the economy; the built and natural environment; and all communities, starting with reducing such impacts in Environmental Justice Communities.

The climate crisis already adversely impacts San Francisco and influences how people live, work, and play. The climate crisis will accelerate impacts for decades to come. In San Francisco, there are 13 main hazards that have the most potential impact to the City. Of these hazards, seismic hazards pose the greatest direct risk to human life and safety via the failure of buildings and other structures during shaking or ground failure. In addition to tragedy, there will be substantial economic losses and severe social, cultural, and economic dislocations. These same consequences are threats across all other hazards, including slow-moving hazards such as sea level rise and emerging hazards such as poor and hazardous air quality. As the climate crisis worsens, hazards are occurring more frequently, intensely, and simultaneously—with compounding impacts. It is critical to ensure robust levels of safety and resilience relative to all hazards, by learning more about the risks posed to vulnerable communities and developing plans to reduce those risks; and by considering hazards in all land use, infrastructure, and capital planning.

OBJECTIVE 3.1.

EXISTING BUILDINGS. **ENSURE RETROFITS AND RENOVATIONS TO EXISTING STRUCTURES INCREASE BUILDING LONGEVITY AND MEET CURRENT BEST PRACTICES TO PROTECT OCCUPANTS AND STRUCTURES.**

Risk Reduction

POLICY 3.1.1.
Reduce the risks presented by City-owned structures and privately-owned buildings and provide assistance to vulnerable communities with limited adaptive capacity to reduce those risks.

Hazards such as earthquakes can cause damage to buildings that render them unsafe to occupy or cause them to collapse. Sea level rise and flood hazards can cause permanent inundation. Poor and hazardous air quality can exacerbate indoor and outdoor air pollution. The City needs a comprehensive approach to address the resilience of all at-risk structures and buildings where people live, gather, and work.

While the City has numerous programs in place to bring public buildings into seismic compliance, addressing privately-owned buildings is a political, legislative, and financial challenge. The Community Action Plan for Seismic Safety (CAPSS) and Earthquake Safety Implementation Program (ESIP) is a 30-year implementation plan to support the City's resilience in the face of probable earthquakes along the San Andreas and Hayward Faults. These programs address seismic risk reduction for many building uses, such as residential and commercial.

The City should create additional action plans and implementation plans to address the range of hazards that are occurring more frequently, intensely, and simultaneously. These actions should address non-ductile concrete frame buildings, old construction in need of retrofits, pre-cast concrete tilt-up buildings, and housing units that serve low- and very low-income residents.

POLICY 3.1.2.
Reduce the risk of all hazards, especially geological, weather-related, and fire-related hazards, posed by concrete buildings and older, small, wood-frame residential buildings.

The City's current programs for unreinforced masonry buildings and soft-story wood-frame buildings apply to larger scale and commercial structures. Individual homes or buildings under 5 units are not required to be seismically strengthened. Some individual homeowners make upgrades to their buildings voluntarily, but that number could be substantially increased with more programs designed for safety improvements by homeowners. "Soft-story" buildings, in which the ground story has much less rigidity and strength than the rest of the structure, pose significant hazards. Often, the soft story is the result of multiple garage door openings or ground floor parking. Soft-story failure was responsible for nearly half of all homes that became uninhabitable in the 1989 Loma Prieta Earthquake. Photographs of the Marina District became iconic symbols of the compounded seismic risks from earthquake and liquefaction for housing built on top of landfill, loose, or saturated soils. The City estimates 43% to 85% of un-retrofitted soft-story buildings will be uninhabitable following a major earthquake.

The City should adopt incentives and regulations to encourage relatively simple retrofit approaches that increase the structural stability and safety of smaller wood-frame residential buildings, as well as consider a phased mandate for retrofits over a 30-year timeframe as directed by the Community Action Plan for Seismic Safety and the Earthquake Safety Implementation Plan. The City's Mandatory Soft Story Retrofit Ordinance established an inventory of buildings with five or more units and required their owners to evaluate and retrofit at-risk buildings. This program has been successful, with an 85% compliance rate for buildings that fall within the program's purview. Next, the City should enact a concrete building retrofit program, in accordance with the Earthquake Safety Implementation Plan. Older non-ductile concrete frame buildings and rigid wall flexible diaphragm buildings, aka "tilt-ups" with high-level risk should be addressed.

POLICY 3.1.3.
Abate structural and non-structural hazards in City-owned properties.

Both technical and financial resources are needed to repair and retrofit City-owned properties. The City shall use its capabilities to assess hazards and to create and implement bond and other funding opportunities to carry out retrofit projects. Through bond financing, numerous City buildings have already been structurally upgraded.

There still remain important City-owned buildings that present seismic risks, as identified in the 10-Year Capital Plan, Hazards and Climate Resilience Plan, and other studies and plans.

The City's Capital Improvement Advisory Committee (CIAC) acts as the policy body advising the City's capital-planning process. Recognizing that certain kinds of public buildings are critical to the community's functioning, the CIAC should work to establish a clear prioritization for these projects, develop an implementation program for their upgrade including funding sources (such as bond measures), and establish a timeline for the improvements.

POLICY 3.1.4.
Encourage property owners to evaluate their risks to all hazards.

Many property owners hold a misguided perception that federal and state sources will provide financial assistance after a disaster. But, federal aid provided in a declared disaster does not protect individual homeowners. When a major disaster hits an entire area, local governments are often strapped with simply providing funds necessary to repair major public infrastructure and buildings.

The City can encourage residents and businesses to evaluate their own risk and the repercussions they might face from reasonably foreseeable hazards. Whether through a formal risk assessment through a qualified consultant or simply through a personal assessment that evaluates the potential for damage, property owners should consider the full range of opportunities for decreasing their risk. This risk should be clearly communicated to tenants, upon sale of buildings, and be made part of public City records.

POLICY 3.1.5.
Support the ability to shelter in place and provide help for vulnerable communities with limited adaptive capacity.

The term "shelter in place" refers to people's ability to remain in their home or another place of shelter and stay there until instructed otherwise, due to ongoing hazards outside of the home that threaten health and life safety.

Seismically, for a building to have shelter-in-place capacity, it must be strong enough to withstand a major earthquake without substantial structural or non-structural damage. This is a different standard than that employed by the Building Code, which requires buildings to meet life-safety standards. In some cases, a building may not collapse, but might be deemed unusable because of the level of damage. Shelter-in-place housing standards would mean that a building is safe enough to live in during the months after an earthquake, but it may not be fully functional as a hospital or other public facilities would need to be.

Supporting shelter-in-place capacity can help minimize the need for emergency housing and services post-disaster, keep current residents in their homes, and minimize disruption of society and the economy. This could greatly minimize recovery costs and allow communities to remain intact.

Historic Preservation

POLICY 3.1.6.
Maintain a data clearinghouse of existing housing and building stock that inventories their features' architectural and cultural character, vulnerability and resilience to all hazards, and other resilience features.

In order to make holistically-informed approaches and strategies to improve the safety and resilience of the City's housing and building stock, the City needs a complex set of readily available, current, and high-quality data. The data on housing and building stock, including its location, specifications, conditions, and use, is managed by a number of City agencies and private sector actors, making it difficult to conduct research, assess the vulnerability and consequences to hazards, and identify opportunities to increase safety and resilience.

The City should develop and maintain a data clearinghouse that supports existing and projected housing and their interaction with all hazards. This clearinghouse can demarcate types of structures and buildings with known vulnerability to hazards, such as concrete buildings and wood-frame buildings, and denote opportunities for improving resilience, such as removing gas lines. The clearinghouse can utilize property information from past and current building surveying efforts, including the San Francisco Citywide Cultural Resources Survey (SF Survey), as well as existing information found on the Planning Department's Property Information Map.

POLICY 3.1.7.
Starting with properties associated with Environmental Justice Communities, expand life safety and functional recovery considerations to increase the likelihood that historically valuable architecture and structures will survive all hazards, and encourage the adaptive reuse of historic structures.

Older buildings are among those most vulnerable to destruction or heavy damage from a large earthquake. They are less likely to have more recent engineering features or be built to current codes. This makes these buildings less resilient to ground shaking, and many of them are located in areas near the bay and the historic bay inlets with the City's softest soil conditions. These buildings may also have ornate façade structures that, in the event of an earthquake, can detach and threaten people on the street.

A major earthquake could result in an irreplaceable loss of the historic built fabric and social communities of San Francisco. Part of the City most vulnerable to fire also contains many historic structures. North Waterfront, South Beach, Mission Bay, Potrero Hill, Hunters Point, Civic Center, Downtown, Tenderloin, and Hayes Valley neighborhoods have moderate risk for large urban fires. Additionally, San Francisco's waterfront is lined with historic structures, including historic pier structures, vulnerable to risks posed by current flooding and accelerating sea level rise. Furthermore, stormwater flooding may pose risks to properties more inland in neighborhoods including the Mission, South of Market, and Bayview. The City should mitigate these hazards in a way that preserves the historic structures and fabric of the different neighborhoods.

When new programs are being considered to abate hazards posed by existing buildings and structures, the likely impacts of those programs on historic buildings must also be thoroughly investigated. The resulting programs should encourage the retrofit of older buildings in ways that preserve their architectural and historical character while increasing life safety and functional recovery. When development concessions, transfers of development rights, or City funds are granted to promote preservation of historic buildings, there should be reasonable measures taken to increase the building's resiliency to environmental hazards.

POLICY 3.1.8.
Safeguard diverse elements of the City's living heritage through supporting the protection and/or adaptation of intangible elements and their ties to the City's natural and built environments, which collectively contribute to San Francisco's cultural identity.

In the event of a hazard, there may be damage to the people, resources, and opportunities that contribute to San Francisco's living heritage. These diverse and intangible elements of living heritage, such as performing arts, traditional crafts, foodways, rituals, and festivals, must be protected and adapted against the threats of all hazards.

After a hazard, the unique materials and supplies necessary for living heritage may be destroyed or heavily damaged beyond function. The opportunities and space to come together and practice rituals and festivals may be lost or deemed unsafe. The people and communities who own, practice, and appreciate acts of living heritage may be lost or displaced.

The City should identify the elements that contribute to San Francisco's cultural identity, as that identity has been and may be evolving over time, and work to safeguard these elements from the threats of all hazards.

Resilient Retrofits

POLICY 3.1.9.
Reduce hazards from gas-fired appliances and gas lines, removing gas lines when possible, focusing on communities with concentrations of older housing stock.

In support of the City's goals of becoming a net-zero emissions City by 2040, the City is minimizing reliance on gas and instead electrifying the future. For the remaining gas lines, the City must protect people and assets from seismic, combustion, and related hazards.

A large earthquake is likely to result in fires at a time when the water systems may be disrupted and fire-fighting personnel may be overtaxed. One of the common sources of ignition will be gas leaks from appliances. As part of removing gas lines, support the infrastructure for building electrification. In existing buildings, the San Francisco Lifelines Council recommends the Department of Building Inspection to require electrification with gas shut-off valves as an interim measure to full building electrification.

POLICY 3.1.10.
During building retrofits, follow a comprehensive retrofit strategy to provide support to vulnerable communities, reduce greenhouse gas emissions, and reduce the risk of property loss and damage during wildfires, flooding, and seismic hazards.

During building retrofits, there is opportunity to address a broad range of hazards at once. In addition to improving building resilience, there are improved protections for human safety and prevention of damage and loss of life. The retrofit strategy should address the main hazards the area is susceptible to, including seismic hazards, sea level rise and flooding, urban fire, and poor and hazardous air quality. Building retrofits, which include weatherization and electrification, are needed to meet San Francisco's goal of net-zero greenhouse gas emissions by 2040.

POLICY 3.1.11.
For existing housing and building stock, provide training, guidance, and assistance to build resilience against extreme heat, poor and hazardous air quality, and flooding, especially in Environmental Justice Communities and other vulnerable people.

There is a set of emerging hazards occurring more frequently and severely in the City, exacerbated by the climate crisis. These hazards, such as extreme heat, poor and hazardous air quality, and sea level rise and flooding, are challenging existing approaches to make existing housing and building stock resilient to hazards. As compared to new and projected housing units, the existing housing and building stock—especially older stock—often serve as the City's valuable resource of affordable housing.

For housing security and housing that is safe, healthy, and affordable to people, the City should provide training, guidance, and assistance to weatherize and retrofit. For example, the City can address temperature control, indoor air quality, and elevating property. These resources should be targeted to Environmental Justice Communities and other vulnerable people.

POLICY 3.1.12.
Provide guidance and assistance to residents about the risks associated with their home and their options to improve safety as renters.

San Francisco residents should be informed about the hazard risk profile of their homes and neighborhoods. For existing buildings and new construction, property owners and residents should be notified and informed. The City should pursue policies around mandatory reporting around seismic risk, such as during the time of sale or as permanent notice in building entryways. The City should pair notification with opportunities to learn more, such as pointing to an online directory of hazard and neighborhood profile information and opportunities to increase resilience of housing units.

OBJECTIVE 3.2.

NEW BUILDINGS. **MAXIMIZE THE SAFETY, ENVIRONMENTAL PERFORMANCE, AND CLIMATE ADAPTABILITY OF ALL NEW DEVELOPMENT.**

Hazard Information in Decision Making

POLICY 3.2.1.
Continue to support and monitor research about the nature of all hazards in the Bay Area, including prediction and warning systems, community vulnerability and consequences assessments, and improvements to building performance

and resilience.

Knowledge about hazard risks in the Bay Area is substantial, but always evolving. The City needs to stay informed, through City staff, state and federal agencies like CalOES and the United States Geological Survey, and other professional contacts about advances in the field. New information will be shared with the public and decision makers.

Similarly, new techniques are continually developing in the structural design of structures, and new data is emerging about the actual functional performance of previously retrofitted buildings. For example, the risks of damage to life and property from seismic hazards can be reduced by improved engineering practices. The City should continue to support the institutions, professional organizations, and individuals who carry out research in structural safety. Special attention should be paid to support and seek out research that identifies innovative and low-cost retrofit concepts. Once the City sets new acceptable safety levels, this research should support the engineering requirements to meet safety levels. Similarly, new techniques are continually developing to protect building occupants from poor and hazardous air quality, extreme storms and flooding, and pandemic.

POLICY 3.2.2.
Research and maintain information about all hazards, including adverse impacts on vulnerable communities.

The field of disaster research is growing in both scope and recognition. In recent decades, the September 11 attacks in 2001, the Indian Ocean earthquake and tsunami in 2004, Hurricane Katrina in 2005, the Haiti earthquake in 2010, and the COVID-19 pandemic starting in 2019 are major examples. While research into disasters focused primarily on natural disasters through environmental management, newer research strains extend into terrorism and cyber failures, biological and chemical emergencies, and other community-wide crises. They encompass research components such as organizational response to disasters and the social ramifications of hazards, disasters, and large-scale terrorist attacks.

In addition to the science and management of all hazards, the field is increasingly aware of the disproportionate impact of disaster among different groups of people and the need to prioritize attention to the people most vulnerable to risks and consequences. As hazards occur more frequently, intensely, and simultaneously, it is often Environmental Justice Communities and other vulnerable people who experience the impacts of disaster first and more severely, and who take longer to recover compared to the rest of the City. For some people, they have the resources and adaptive capacity to bear a disaster and recover to pre-disaster levels with relative ease. For vulnerable communities, there are higher risks, limited resources, and constrained adaptive capacity, meaning that research on all hazards should account for these dynamics of adverse impact and work to address these community needs.

The Department of Emergency Management should keep abreast of evolutions in this field of research, particularly as new threats emerge and as new methods of mitigating those are developed. The City should also continue grow its partnership with community response teams, such as the Neighborhood Emergency Response Team (NERT) and the Neighborhood Empowerment Network's Empowered Communities Program (ECP). NERT is a community-based training program dedicated to a neighbor-helping-neighbor approach to disaster response. The NERT program trains volunteers to work as members of an emergency response team, preparing them to respond to a personal emergency or assistance to Fire Department response. ECP is a community development approach to neighborhood-level disaster resilience, empowering neighborhoods to develop and implement strategies that strengthen communities during hazard events.

POLICY 3.2.3.
Coordinate interagency Citywide efforts to assess the City's vulnerabilities to multiple hazards, such as poor air quality, flooding, and extreme heat.

As the City continues to experience more extreme, more frequent, and more simultaneous hazards, the interagency climate resilience program should be empowered to assess the City's vulnerabilities to a complex set of hazards. The City should develop a citywide assessment, at the neighborhood level, to generate baseline information around the vulnerabilities and consequences to all hazards. This assessment should include impacts on Environmental Justice Communities and other vulnerable people, businesses and the economy, historical and cultural resources, and critical infrastructure. This assessment should support increasing public awareness for emergency preparedness. Currently, there is ClimateSF as an interagency collaboration to advance the City's climate resilience activities, including the Office of Resilience and Capital Planning, Planning Department, Department of the Environment, the Port, and Public Utilities Commission.

POLICY 3.2.4.
Ensure foundations and structural systems are designed with consideration of site soils conditions when reviewing projects in areas subject to liquefaction, slope instability, sea level rise, groundwater rise, and other flood hazards.

The Building Code considers soil conditions at a very general scale. But, soil conditions vary enormously throughout the City. Different soil conditions can result in very different earthquake impacts and can result in damage at other times, such as with landslides. Because of the importance of soil conditions, the California Seismic Hazards Mapping Act requires that a geotechnical investigation and geotechnical report be prepared for new or renovated buildings that are constructed in Seismic Hazard Zones.

Pursuant to this act, the Department of Building Inspection (DBI) requires geotechnical reports prepared by a licensed geologist and geotechnical engineer for projects in areas with susceptibility to ground failure, including liquefaction and landslides. DBI has procedures in codes and bulletins identifying when projects are subjected to additional geotechnical review and requirements based on site conditions and/or proposed scope of work to support these efforts.

Additionally, there is ongoing research of the interaction of sea level rise and flood hazards with the potential mobilization of soil contamination.

POLICY 3.2.5.
Provide training, guidance, and assistance for the geotechnical and foundation issues unique to tall buildings.

In San Francisco, there is a unique concentration of tall buildings that are 240 feet or taller. These tall buildings have advanced and complex characteristics and demands for seismic safety. Their structural systems preclude generic performance assumptions and prescriptive engineering solutions, and they are increasingly being used to house residents.

Based on the Tall Buildings Study and Earthquake Safety Improvement Program, the City should implement mandatory training and guidance to property managers and tenants around the seismic safety of tall buildings, as well as offer assistance to improve the geotechnical and foundational issues in the event of an earthquake. The Department of Building Inspection (DBI) developed guidelines for preparing geotechnical and earthquake ground motion reports for the foundation design and construction of tall buildings. DBI also requires performance-based structural design reviews for buildings above 240 feet tall (and some building types above 160 feet tall), and they convene an engineering design review team of external consultants to review and advise on proposals of new tall buildings.

As tall buildings are increasingly being used for housing purposes, in addition to business purposes, the City should set up data monitoring to track building use and resident demographics in order to address additional vulnerabilities.

POLICY 3.2.6.
Consider hazard information during City decision-making processes about land use, building density, building configurations, and infrastructure.

Land use decisions should be made with hazards in mind. The Planning Commission, the Board of Supervisors, and other City decision makers shall be aware of and consider hazards when making decisions that will affect the types and structures that will exist in the future, including existing and potential structures, land uses and their associated densities, transportation, and other infrastructure.

Changes to the General Plan, Area Plans, and Planning Code should take into consideration the prevalent disasters affecting the City and the effects they may have on the safety of future development. These considerations should balance with other environmental justice and community welfare concerns, ranging from safety to community health to economic security to quality of life.

In order to protect City property, building codes and technical knowledge must be as up to date as possible as new engineering expertise is gained. Keeping abreast of such information and technologies should be a priority for the City.

POLICY 3.2.7.
Monitor emerging industries like bioscience and other lab-based sectors, and ensure that state and local codes manage risks effectively.

The City has made it a goal to encourage the bioscience industry, as well as other lab-based industries, in the City because of its economic development potential. The University of California, San Francisco (UCSF) is a generator of life science and bioscience companies, it and has made the Bay Area a center for the industry. The number of companies located or seeking space in the City is expected to grow.

Many medical research laboratories handle biological materials, which may generate radioactive or otherwise hazardous materials and waste. Because of this, bioscience and biotechnology lab facilities in the City are subject to hazardous materials safety regulation by the federal government, state government, and the San Francisco Department of Public Health. Firms are required to generate Hazardous Materials Business Plans including storage and secondary containment policies; Emergency Response Plans; and training plans to educate staff about handling and disposal. Currently, state and federal regulations are adequate and sufficient to govern bioscience activities. In addition, San Francisco has adopted more stringent threshold reporting requirements for labs resulting in greater local oversight.

Lab-based sectors such as bioscience are likely to evolve, and the functions of the firms located in the City may shift. The City should monitor these industries to ensure safety regulations continue to be applicable. The City should encourage performance-based design and engineering technologies to protect the safety of critical research projects, particularly if facilities are vulnerable to hazards.

Promote Green Building

POLICY 3.2.8.

During retrofits and new construction, prioritize building practices that emit lower greenhouse gasses and build resilience to multiple hazards at once, especially in Environmental Justice Communities.

When retrofitting existing construction and developing new construction, use the latest building practices to emit lower greenhouse gasses and increase resilience to multiple hazards at once. In Environmental Justice Communities, where there are disparities in the prevalence of safe, healthy, and affordable homes, it is especially important to prioritize low-carbon building practices without jeopardizing housing affordability. In addition to the latest building standards, pursue building electrification, urban greening, low-carbon building materials, weatherization, interactions with the public realm, and other green building practices.

POLICY 3.2.9.

Continue to promote green stormwater management techniques.

The City has an abundance of impervious surfaces. Buildings, streets, parking lots, and other paved surfaces prevent the absorption of rainfall, so low-lying areas of the City are particularly susceptible to flooding in heavy rains. In addition, urban stormwater runoff can be highly polluted, and pollutants that go down storm drains can have negative impacts on the sewer and storm system, contributing to system overflows. Natural systems can often be an effective supplement, helping to absorb the overflow and filter out pollutants from that runoff.

Building and site development should include natural systems wherever possible. Natural vegetation, landscaped swales, and gardens included in site designs can reduce, filter, or slow the spread of stormwater runoff. “Green streets” that include pervious concrete, planters, and landscaped strips adjacent to sidewalks can assist the City’s sewer discharge capabilities. Green roofs incorporated into buildings provide another method of absorption. Similarly, sustainable construction techniques can be used to mitigate against the effects of future disasters. Green building technologies now allow for buildings that can provide their own power and filter their own water from runoff. This helps reduce two problems associated with disasters, the need for power and the need for potable water.

The City needs bolstered flood control structures and flood proofing to respond to the anticipated impacts of extreme storms. To prepare, the Public Utilities Commission can continue upgrading the City sewer system, and also critical are more imaginative solutions, like capturing stormwater for irrigation, increasing urban forestry activities, and other green uses.

OBJECTIVE 3.3.

INFRASTRUCTURE AND PUBLIC REALM. **ENSURE THE CITY’S LIFELINE SYSTEMS, TRANSPORTATION AND EMERGENCY RESPONSE FACILITIES, UTILITIES, STREETS, PUBLIC SPACES, AND COASTS CAN WITHSTAND AND ADAPT TO ALL HAZARDS.**

Public Assets and Awareness

POLICY 3.3.1.

Reduce the risk of all hazards to community facilities and lifeline infrastructure, starting with Environmental Justice Communities.

For safety and resilience, community facilities and lifeline infrastructure serve as key assets in emergency management. Many types of community facilities can be areas for refuge and evacuation, storing and distributing disaster supplies, and providing critical services like medical care. Community facilities provide public services, such as public schools, childcare facilities, fire stations, police stations, recreation centers and parks, public and non-profit health facilities, libraries, arts and culture facilities, social welfare facilities, and facilities serving the homeless. In addition to facilities supported by the Community Facilities Element, the City can coordinate with other institutions such as private schools and places of worship. Identify the network of these facilities, assess their vulnerability and consequences to hazards, and create a set of strategies to mitigate harm so that these are available and functional to the community during disaster.

POLICY 3.3.2.

Identify and replace vulnerable infrastructure and critical service lifelines in high-risk areas.

In the event of a disaster, two of the most critical networks will be the City’s water system and its sewer and sanitation lines. Upgrades are already underway: the San Francisco Public Utilities Commission (SFPUC) and Public Works have ongoing programs to replace vulnerable water mains and sewers and to improve performance of the systems during earthquakes—by including system segmentation, safety shut-off systems, and redundant back-up systems or other methods of reducing damage—and providing alternative sources of service. SFPUC is undertaking a Water System Improvement Program to strengthen the Hetch Hetchy water transmission system against earthquake damage. A connecting pipeline is currently under construction to connect the region’s major water supply systems of the Hetch Hetchy, managed by the SFPUC, and the reservoirs in Calaveras, Amador, and Alpine counties managed by the East Bay

Municipal Utility District (EBMUD), which will enable water to be distributed from one Bay Area system to another in the case of failure. However, aging infrastructure in the City's sewer and sanitation system is a concern—beyond ailing pipes, the City's tunnels, pump stations, and treatment plants need upgrades and repairs. The San Francisco Sewer System Master Plan project currently underway at the SFPUC will eventually provide a detailed roadmap for these major improvements and provide a plan for funding these improvements.

Other upgrades underway include Pacific Gas and Electric's seismic program replacing vulnerable gas lines, and Caltrans' bridge and highway retrofit programs. BART is in the midst of a system wide seismic upgrade project; the City should lobby for continued seismic retrofit and disaster-resistance measures on our regional transportation systems such as Caltrans and AC Transit. More upgrades are needed to PG&E's electric system to reduce the risk of service disruption to customers, including transmission improvements, replacement of vulnerable transformers, circuit breakers, and other at-risk components of the electric system. The City should require a specific plan detailing these improvements, and a timeline for their implementation.

POLICY 3.3.3.

Conduct capital planning to advance resilient infrastructure prioritizing life safety and functional recovery, as well as the needs of Environmental Justice Communities and other vulnerable people.

In capital planning, incorporate environmental justice analysis of community facilities and other critical infrastructure that serve, impact, and are more used by Environmental Justice Communities and other vulnerable people. Community facilities provide public services, such as public schools, child-care facilities, fire stations, police stations, recreation centers and parks, public and non-profit health facilities, libraries, arts and culture facilities, social welfare facilities, and facilities serving the homeless. With community outreach and engagement, listen to resident needs and priorities of their built environment and public realm. Explore how public infrastructure projects can limit environmental justice burdens and improve outcomes for active transportation, open space access, and climate resilience.

POLICY 3.3.4.

Where there are ongoing and known plans for future public infrastructure projects, consider prioritizing maintenance of public access and protecting the public rights-of-way above the needs of private property and development.

Public infrastructure projects often depend upon the system of public rights-of-way for accommodation. For this reason, the City should prioritize maintaining and protecting the public rights-of-way, above and below street level, for future public use. The City should refrain from issuing encroachment permits to private development without considering these priorities.

For certain public infrastructure projects to deliver lifeline and other public services, they can be so large and complex that they cross multiple jurisdictional boundaries and rights-of-way between public and private spaces. The City must protect the public-rights-of-way, especially above the needs of private development projects, to have a space to deliver public services. Ensure that private encroachment permits do not interfere with future public infrastructure projects.

POLICY 3.3.5.

Provide training, guidance, and assistance for nearby communities most impacted to potential threats and consequences to public assets and infrastructure within the Sea Level Rise Vulnerability Zone.

In the Sea Level Rise Vulnerability Zone, over six percent of the City's land (about four square miles) could be inundated by temporary or permanent flooding by 2100. This will affect people, jobs, and vital infrastructure in the City. There are public assets and infrastructure like the Muni yard and San Francisco Public Utilities Commission water stations that are at risk. The City should develop training, guidance, and assistance to communities in and adjacent to the vulnerability zone on how these assets may be affected and how their lives may be impacted. These resources should increase the City's understanding of how sea level rise and inundation is a potential threat and consequence to the vulnerable communities; increase communities' understanding of adaptation efforts underway; how to stay involved; increase adaptation capacity; and decrease disruptions in service.

Resilience to Future Hazards

POLICY 3.3.6.

Maintain research, monitoring, and guidance related to earthquakes, sea level rise, and flood hazards to inform a framework for future investments and development.

In San Francisco, earthquakes are the greatest hazard risk to life and property due to the San Andreas and Hayward Faults. Within the next 30 years, the probability of the San Francisco Bay region experiencing an earthquake measuring magnitude 6.7 is 72%. Unlike other hazards, earthquakes strike without warning. Even if the next earthquake was accurately predicted with a week's warning, without advance planning and action, there are tens of thousands of seismically vulnerable buildings throughout the region that would be

severely damaged or collapsed. On the other hand, sea level rise is a slow-moving threat that also demands immediate action. By 2030—without taking any adaptation actions—the City is at risk of sea level rise negatively impacting 5,000+ residents, 10,000+ jobs, 200+ acres of open space, and other communities, buildings, and assets.

The City needs to learn more about the evolving science of earthquakes, sea level rise, and flood hazards, monitor the impacts and potential threats to the people and assets of the City, and guide adaptation and response activities to these hazards. It is especially important to understand the interactions of these hazards, and with other hazards like biological hazards (e.g., hazardous materials), to inform effective investment and development of strategies for resilience.

POLICY 3.3.7.
Support the development and updates to building, planning, and other municipal code requirements that meet City climate and seismic resilience performance goals.

The design and construction methods used in buildings are critical to community safety and resilience. At regular intervals, use best practices to review and amend all relevant public codes to incorporate the most current knowledge of structural engineering regarding seismic risks; design and site new buildings considering flood and sea level rise elevations; and green building practices relative to best biologic and ecosystem processes.

Among U.S. cities in areas of very high seismic hazard, the City is unique because of its geography, urbanization, and reliance on public transportation. Current seismic codes ensure that new buildings are earthquake- and fire-resilient, and protect people inside buildings by preventing collapse and allowing for safe evacuation. However, current code requirements do not necessarily limit damage to a structure, or ensure its function post-earthquake. Damage to new buildings and developments can have magnified impacts that affect adjacent structures and the City's lifelines.

A number of factors support the idea that new and retrofitted buildings in the City should be built for better seismic performance than the default level provided by the current Building Code. Consider creating tiered, "enhanced" levels of seismic performance that are performance-based by offering incentives such as priority processing (similar to a LEED certification for sustainable design).

There are additional nature-based solutions that support the built environment's contribution to enhanced natural ecosystem function. Consider higher floor elevations, softscape and natural buffers, and other flood proofing approaches within the Sea Level Rise Vulnerability Zone. Use the latest climate resilient expectations in the Building Code.

POLICY 3.3.8.
For new construction and public assets, consider resilience measures against future climate projections and other hazards, beyond current life safety expectations in building codes.

Many hazards, such as sea level rise and extreme heat, are occurring more frequently and intensely. The research shows nonlinear projections of how these hazards occur and impact the City. While building codes prioritize life safety and seek the latest best practices, the Safety & Resilience Element encourages resilience measures in new construction and public assets to act aggressively against all hazards and their future climate projections. As the climate crisis worsens, it is beneficial to act out of an abundance of caution to protect the safety and increase resilience of people and assets. The City encourages utilizing resilience measures that may not be reflected in building codes yet or may not yet have been applied.

POLICY 3.3.9.
Design and utilize open spaces considering their use as emergency gathering areas, floodable spaces, and ecosystem services, per the Recreation and Open Space Element.

For certain hazards, such as earthquakes, flooding, pandemic, and extreme heat, open spaces in the public realm can serve as critical spaces for emergency gathering (evacuation, shelter) and buffers (retreat). Per the Recreation and Open Space Element, design and utilize open spaces to act as emergency gathering areas that are low-risk, flexible use, and resilient. Additionally, these open spaces along and near the ocean and bay shorelines can serve as floodable spaces as part of nature-based solutions to sea level rise and flood hazards.

POLICY 3.3.10.
Identify and maintain emergency access areas and potential evacuation routes to support capacity for future emergencies and evacuations.

During certain disasters, the City must maintain an essential transportation network to facilitate disaster response and safety. Public Works maintains an Emergency Priority Route Map which is integrated into the Department of Emergency Management's Emergency Response Plan. The map identifies a priority route network for City agencies to conduct damage assessment and maintain critical facilities and services post-disaster, such as a major earthquake.

For evacuation needs, the City must also maintain the safety and function of streets and roads to activate as evacuation routes and emergency access areas at any time. These transportation corridors will need to support an influx of users and maintain structural integrity and function during a large earthquake or other disaster. As part of identifying potential evacuation routes, the City must identify accessibility needs of people with limited mobility options and other vulnerable people, such as people with disability, access, and other functional needs.

Where known, consult with relevant authorities governing major transportation corridors and access areas to ensure all levels of government are aware of the current and future capacity expectations for safe evacuation. These activities should include sub-surface, ground, air, and water transportation routes.

OBJECTIVE 3.4.

SPECIFIC HAZARDS. IDENTIFY AND PURSUE PROGRAMS AND PROJECTS THAT MITIGATE AND SAFEGUARD AGAINST MULTIPLE HAZARDS ACROSS MULTIPLE ASSETS, ESPECIALLY FOR ENVIRONMENTAL JUSTICE COMMUNITIES AND OTHER VULNERABLE PEOPLE.

POLICY 3.4.1.
Assess, mitigate, and provide holistic information about all hazards affecting the City, as identified in the Hazards and Climate Resilience Plan.

The City should advance research and understanding of all hazards and their impact to the people and assets of San Francisco. The Hazards and Climate Resilience Plan (HCR) serves as the City's Local Hazard Mitigation Plan (LHMP). The City should work with the academic community, appropriate government agencies, and other stakeholders to assess the threat and impact of the 13 main hazards to the City. Coordinate this basic research with the appropriate data clearinghouses in the City that relate to achieving racial and social equity, public awareness, and informing decisions around capital planning and development.

These hazards include geologic hazards (earthquake, tsunami, landslide, and dam or reservoir failure), weather-related hazards (flooding, high wind, extreme heat, and drought), fire-related hazards (large urban fire, wildfire, and poor air quality), and biologic and toxic hazards (pandemic and hazardous materials).These hazards can include the latest emerging hazards that may not be reflected in the Hazards and Climate Resilience Plan, such as sea level rise and noise pollution.

POLICY 3.4.2.
Protect against the risks of using, storing, and transporting hazardous materials and increase public awareness, particularly in areas prone to seismic and flooding risks.

The City should coordinate with the appropriate regulatory and monitoring agencies for the use, storage, and transportation of hazardous materials. The location of hazardous materials, existing and potential, should be in areas resilient to seismic and flooding hazards to minimize the spread as an environmental pollutant and threat to public health. Where hazardous materials are close to people, and critical assets like the water table, the public should be notified and empowered to seek more information and resources to protect health and safety.

POLICY 3.4.3.
Educate the public about hazardous materials procedures, including transport, storage, and disposal.

Hazardous materials include chemical, biological, radiological, nuclear, and explosive substances (CBRNE). Accidents such as toxic releases from facilities and vehicles, fires and explosions caused by chemical releases, and oil spills in the bay are not uncommon. There is also increasing awareness and research about the mobility of hazardous materials during inundation and flood hazards, particularly towards the groundwater table. The Federal Emergency Management Agency (FEMA) has estimated that an average of 60,000 accidents and over 200 deaths involving chemicals occur in this country every year. The City should support research about the interaction of toxic substances with groundwater threats.

Several of the City's agencies provide businesses and residents with information about safe disposal of hazardous materials, primarily the Fire Department and Department of Public Health. The City's Fire Department is responsible for administering local safety regulations for business operating with hazardous materials, and it is the first responder to chemical and hazardous spill accidents. The Fire Department is also the point of contact for risk/hazard assessments, capability assessments, and detailed response planning. The Department of Public Health enforces state and City environmental health laws, including hazardous materials storage; issues hazardous materials use permits; and investigates illicit discharge and disposal of hazardous materials.

For common CBRNE hazards at the household-level, the Neighborhood Emergency Response Team (NERT) educates the community about their indicators and safe disposal methods. The Public Utilities Commission also provides residents and businesses with information (through ads and website resources) on how to properly dispose of hazardous materials including waste oils, such as motor oil.

POLICY 3.4.4.

Develop a plan for supporting Environmental Justice Communities and other vulnerable people during Sheltering-in-Place activities, to protect from poor and hazardous air quality, pandemic, and other hazards.

During a disaster, sheltering in place may be necessary to social distance, prevent the spread of disease, protect from threats to health and safety, and support public health. Sheltering In Place requires safe, healthy, and affordable housing be available to all. It limits the ability for people to conduct their routine behaviors for living and working, such as grocery shopping, going to work, and going outdoors for physical and mental health. The City should develop a plan for supporting Environmental Justice Communities and other vulnerable people during shelter in place, including assessing information and resource needs, culturally competent communication, outreach of public services, and disaster supplies.

POLICY 3.4.5.

Prepare for efficient and equitable responses to medical emergencies and pandemics.

On January 21, 2020, the City activated its Emergency Operations Center to support the response to COVID-19 and coordinate with active Department Operations Centers. Mayor Breed's early decision to proclaim a local emergency was instrumental to San Francisco's ultimate success responding to the pandemic, allowing City agencies to enact emergency procedures that helped save lives. As of December 2021, the City continued to have the lowest cumulative per capita COVID-19 mortality rate among other large jurisdictions.

The COVID-19 Pandemic Response After Action Report outlined the strengths of the City's response and suggested further updates to enhance the City's emergency response plan. In addition to early and rapid action, the City's successful response can be attributed to the unified priorities, pooled resources, and clear communications that came from the coordinated COVID Command Center, as well as the flexibility and capacity provided by the Disaster Service Workers. Specifically, improvements should focus on increasing racial and social equity in the community, improving the City's Disaster Service Worker program, and providing further clarity and streamlining to both the organization of response services and procurement of disaster supplies.

For all future pandemics and other medical emergencies, the City should create an advance plan to prepare for a similarly successful early and rapid response. This plan should include the disease testing and response capacity of hospitals; disaster supply needs at the household, neighborhood, and citywide level; community health capacity of community facilities; and accessibility capacity of public information. The City should ensure the public is kept well informed about evolving information regarding the public health emergency. The City should ensure systems are in place to ensure continuity of public services, such as public transportation and utilities service with staff absences. The City should solidify plans to ensure access to a stockpile of emergency services to use and distribute, such as medicine and protective equipment.

POLICY 3.4.6.

Assess and mitigate the risk of flooding by incorporating the Flood Insurance Rate Map for San Francisco and related programs.

The National Flood Insurance Program (NFIP), managed by the Federal Emergency Management Agency (FEMA), provides low-cost flood insurance for communities that adopt floodplain management programs to help mitigate flood losses and damages. FEMA uses the Flood Insurance Rate Map (FIRM) to identify areas with 1% annual chance of flooding, and it uses this as the basis for insurance rating.

FEMA approved the City's application for participation in the NFIP in April 2010, and subsequently, the City has amended the 2008 Floodplain Management Ordinance in order to meet NFIP requirements. The established flood damage reduction program provides homeowners and other property owners the opportunity to purchase federally-subsidized flood insurance at affordable rates. FEMA issued a preliminary FIRM for San Francisco in 2007. The final map and ordinance was adopted in 2020.

The Floodplain Management Ordinance requires the first floor of structures in flood zones to be constructed above the floodplain or to be flood-proofed with variances for exceptional circumstances. The map, as proposed, would designate portions of waterfront piers, Mission Bay, Bayview Hunters Point, Hunters Point Shipyard, Candlestick Point, and Treasure Island in coastal flood hazard zones, which may have implications for development plans and insurance requirements in those areas.

To mitigate against potential risks, the City should maintain NFIP participation and use the information provided by FEMA to engage in additional floodplain improvements to at-risk areas. The City should continue to implement ordinance requirements for new construction, address flood hazards in wastewater projects, and pursue ordinance requirements for substantial improvements projects located in Special Flood Hazard Areas.

POLICY 3.4.7.

Support retrofitting measures for historic buildings vulnerable to current or future flooding, while respecting architectural and historic character, consistent with pertinent local or federal design guidelines.

Consistent with design guidelines at the local and federal levels, address the unique retrofitting measures required for historic buildings that are vulnerable to sea level rise and flood hazards. The U.S. Secretary of the Interior issued flood mitigation design guidelines for historic properties, and the City can explore additional design guidelines that respect the architectural and historic character that is vulnerable to damage.

Goal 4. Emergency Preparedness

Ensure San Francisco's residents, workers, and visitors have the knowledge, capacity, and government support needed to be safe in the face of disasters. The City must be prepared to respond quickly and effectively in the case of a disaster. In order to meet the needs of its people and assets after a disaster, response, recovery, and reconstruction plans must be prepared in advance to the extent possible. The City must have the coordination necessary to execute them rapidly. In addition to readying its own agencies and departments, the City must ensure all people are aware and prepared for the possibility of disaster. State and local emergency responders advise people to be prepared for a minimum of 72 hours of self-sufficiency after a large earthquake. Achieving preparedness is even more critical for vulnerable populations and those in geographic areas and building types that are more vulnerable to earthquake damage.

OBJECTIVE 4.1.

AWARENESS AND CAPACITY BUILDING. **INCREASE THE UNDERSTANDING AND TRAINING OF EQUITABLE EMERGENCY PREPAREDNESS TO ALL HAZARDS AMONG ALL GOVERNMENT, PRIVATE, AND PUBLIC SECTORS.**

POLICY 4.1.1.
Provide ongoing emergency preparedness and response training to all City employees and other responding agencies.

Under state law, all public employees are designated Disaster Service Workers. At any time during an emergency that results in conditions of disaster or in extreme peril to life, property, and resources, City employees could be assigned to any disaster service activity that promotes the protection of public health and safety. The Department of Human Resources (DHR) manages the City's Disaster Service Worker Program, which includes mandatory training for all City employees. The Department of Emergency Management (DEM) is responsible for ensuring that City employees are trained to perform as needed under the City's emergency plans.

The City should also continue to hold multi-agency drills on a regular basis to test and refine emergency plans. During the COVID-19 pandemic, the Disaster Service Worker Program was a vital source of staffing for the Emergency Operations Center and for responding to community needs. DHR, in consultation with DEM and other City agencies, should continue to refine the Disaster Service Worker program so that is deployed equitably continues to be used effectively to bring response activities to the community.

POLICY 4.1.2.
Promote greater public awareness of disaster risks, personal and business risk reduction, and personal and neighborhood emergency response.

People and organizations that are well informed about possible disasters can take effective private measures to reduce their vulnerability to risks. They can also increase their effectiveness in responding to a disaster and helping others when public agencies are overwhelmed. Several of the City's agencies, including the Department of Emergency Management, the Fire Department, the Police Department, Public Works, and the Department of Building Inspection, provide information to the public on what to do in a disaster. As an example, the Fire Department administers the Neighborhood Emergency Response Team (NERT) to deliver on these goals. The Department of Building Inspection maintains a list of earthquake information and emergency power shut down information at its public reception and on its website.

However, information access can be increased beyond these sources, especially to reach populations who may be less familiar with the City system and are less frequent visitors to City buildings. Materials should be placed in everyday materials such as newspapers; alternative venues such as social clubs, community facilities, or service agencies; and distributed via mobile sources at gatherings such as fairs and festivals. Information should be available in large print and on audio cassette for the visually impaired, as well as in a variety of non-English languages.

POLICY 4.1.3.
Create a consolidated website linking all the City's disaster-related information for the public and ensure distribution of the information through offline outreach that is accessible and equitable to all people.

Just as the responsibilities for disaster planning programs is distributed among many agencies and departments within the City, the related information about those programs and operations is dispersed. Much information is housed within the agencies responsible, and it can be difficult for the layperson to access all the information that exists.

The City should utilize technology to redress this issue—a simple solution would be to bring together all the varied information that exists into one website. This site should contain links to hazard maps of geologic hazards and soil conditions; to the City's adopted emergency response plans and other related plans and documents; to programs such as Building Occupancy Resumption Program (BORP) and Neighborhood Emergency Response Team (NERT); to programs for property owners, incentives, and other action items; and to information about emergency services and locations. It should map relevant public information such as drinking areas, evacuation routes, emergency transport pick-up locations and locations of Public Information Centers to be set up in an emergency.

This consolidated website should be accessible to equitably reach all people, through availability on both web and mobile platforms, translation into many non-English languages, and accessible to screen readers.

POLICY 4.1.4.
For pandemic preparedness, develop a framework of healthcare management that combines the City's physical assets with social and management tools to better respond to public health emergencies.

The COVID-19 pandemic transformed society overnight. It rapidly altered how people interacted with one other and the built environment, as society wrestled with how to apply public health principles to stop the spread of the virus and prevent further loss of life. Building on these lessons from COVID-19, as well as other infectious diseases, the City should develop a comprehensive framework of healthcare management that includes physical and intangible resources to maximize public health outcomes. For physical assets, there are medical institutions, public infrastructure, and land use patterns. For intangible resources, there is social cohesion (strength of relationships and sense of solidarity among community members), trust in government, and socio-cultural factors. These two groups of assets can be managed holistically to manage the transmission and control of infectious disease and maximize public health outcomes.

OBJECTIVE 4.2.

CITY AGENCY CAPABILITIES. PLAN FOR THE OPERATIONAL, DATA, AND LOGISTICAL CAPACITIES NEEDED TO FACILITATE COMMUNITY SAFETY DURING THE RESPONSE, RECOVERY, AND RECONSTRUCTION PHASES OF ALL HAZARDS.

Water and Energy

POLICY 4.2.1.
Ensure potable water is available in an emergency.

The San Francisco Public Utilities Commission (SFPUC) has various strategies for supplying and/or distributing alternative water supplies during an emergency. Emergency disinfection may be necessary. The California Department of Public Health has issued guidelines for the use of alternate water sources and the issuance of Unsafe Water Alerts and Boil Water Orders. Usage of alternative water supplies will require coordination with appropriate agencies, such as San Francisco Department of Public Health, California Department of Public Health, San Francisco Fire Department, and others.

At the supply and source level, SFPUC has redundancy of sources under the operational responsibilities of Water Enterprise and Operating Divisions. These include Upcountry reservoirs, East Bay reservoirs, Peninsula reservoirs, and local groundwater. At the treatment level, SFPUC has plans and procedures for responding to treatment issues and disruptions. At the distribution level, SFPUC maintains a range of equipment and procedures for alternate delivery. Equipment includes water trailers, portable disinfection units, and 40 hydrant distribution manifolds. Manifolds, water trailers, and other equipment is stored at either CDD Corporation Yard or storage facility at University Mound. Bottled water is identified as a needed alternate water strategy, and supplies and distribution points would be coordinated and acquired at the City Emergency Operations Center level, through citywide logistics.

The SFPUC has installed 6 groundwater wells on the westside of San Francisco. The groundwater wells currently pump less than 1 million gallons per day (mgd) and is expected to increase to 4 mgd by 2030. Additionally, SFPUC is studying the opportunity to produce and serve purified water in San Francisco.

POLICY 4.2.2.
Ensure renewable energy sources are available for redundant energy in the event of an emergency.

More frequently, the threat of Public Safety Power Shutoffs (PSPS) is affecting San Francisco. The increased frequency of wildfires occurring at the regional and state levels pressure PG&E to turn off power lines during high winds or dry conditions. Fortunately, San Francisco is less likely to experience a PSPS compared to other jurisdictions due to the lower likelihood of wind-induced fire events with

the City and its location on the transmission grid. However, the disruption in energy service is an inconvenience and threat to wellbeing that should be addressed through resilience of the energy grid.

There are many people who rely on continuous, affordable energy for their health and safety, such as storing life-saving medication and motorized wheelchairs. There are also public assets and infrastructure that relies on energy for safety and function, such as broadband internet and traffic lights. PSPS events occur due to a number of potential hazards, such as high winds, drought, and wildfire. The City should pursue strategies for redundant energy sources and use in the event of an emergency, and seek renewable sources of energy that do not contribute to the climate crisis. The City should continue to work with relevant government agencies, the private sector, and other stakeholders to assess capacity to generate, store, and distribute renewable energy for essential lifeline and recovery activities.

POLICY 4.2.3.
Continue to expand the City's fire department prevention and firefighting capability with sufficient personnel and training.

The City faces risk from fires associated with earthquakes. A great number of structures were lost in the 1906 earthquake, not due to the ground shaking itself, but because of the spread of fires that were difficult to battle in the aftermath of the quake. Fires continue to be a great threat, particularly in densely developed areas.

The supplemental water supply systems have been extended and strengthened since the Loma Prieta earthquake, including the Auxiliary Water Supply System, the Portable Water Supply System, cisterns, Bay water suction devices, and fire boats. Staffing and equipment needs of the Fire Department must be foreseen in advance and met. The City needs to improve water supply systems to cover those neighborhoods not served by the Auxiliary Water Supply.

The Fire Department should consider expanding the scope and training of Neighborhood Emergency Response Training (NERT) to include fire suppression, fire reporting, and other neighborhood recovery assistance, and consider coordination with neighborhood-level disaster planning.

Disaster Response

POLICY 4.2.4.
Ensure the City's designated system of emergency access routes is coordinated with regional activities for both emergency operations and evacuation.

After a large earthquake or other disaster, it is likely that many streets will be impassable. This will make firefighting and other emergency response actions more difficult, hinder the movement of people, and interfere with debris removal and other short-term recovery activities. In order to support post-disaster transportation movement, Public Works has developed priority routes for opening during an emergency or disaster. These routes include routes which connect fire and police stations, hospitals, and other critical facilities; routes to emergency drinking water distribution sites and City shelters; and routes to staging areas for disaster service work around the City. These routes enable the necessary clearance width for emergency vehicles and support trucks, and they have been prioritized for debris clearance immediately following a disaster.

The City should ensure that the regional sequence of clearance activities is coordinated to connect with these priority routes, and that the route openings are well-timed to sync with the opening of bridges and regional highways. This coordination can be directed using information from the Transportation Management Center (TMC) staffed by Caltrans, California Highway Patrol, and MTC, specifically its Emergency Operations Center (EOC) which was created for procedural disaster management. In addition, the Regional Emergency Operations Center (REOC) Transportation Branch will distribute a transportation service plan which shall include information related to regional evacuation and route openings. For Caltrans District 4, the EOC is activated to serve as the central location to manage and coordinate responses to major incidents/disasters affecting State transportation facilities.

POLICY 4.2.5.
Utilize the City's and region's transit network to facilitate response and recovery during and after a disaster.

The transit network—bus, rail, freight rail, transit, ferry, and air—will be a critical component of response during a disaster. As dependence on cars will not work well in a state of emergency, the transit network will be a critical component of response during a disaster. The City's vehicular network is limited by bridges and freeways with little redundancy; damage caused by the event to roadway networks, security considerations, and traffic control may require the restriction of private automobile use for months after the event. As of 2022, one in five residents in San Francisco does not have access to a personal vehicle and will require public transportation to access essential services. The transit network provides safe and efficient use of resources and is capable of moving significant numbers of people and equipment with relatively few resources. The San Francisco Municipal Transportation Agency has emergency reserves of fuel and is able to continue operations even when the region faces significant disruption.

Transit may be used in emergency situations to move emergency workers and deliver equipment to sites. Evacuation plans should incorporate public transportation to efficiently evacuate people quickly and efficiently without snarling roadways and impeding emergency operations.

Immediately following a disaster, the City should utilize its transit network to restore mobility—to help bring evacuees back to their neighborhoods, to move daily workers to jobs, and to resume day-to-day life. Coordinated transit services can be used to provide long-range links across counties. Additional temporary transportation improvements such as limited stop buses, bus-only lanes, and the addition of high-occupancy vehicle lanes may help relieve overtaxed freeway segments. The clear conveyance of route information and service maps, such as real-time road safety conditions and available public transit options, can help connect riders to services.

The Bay Area region, under the leadership of a task force that includes the CalOES, Caltrans, the Metropolitan Transportation Commission (MTC) and Bay Area transportation agencies, has developed a Trans Response Plan (TRP). The TRP sets out a framework for a coordinated, multi-modal, and timely response by Bay Area transportation providers to a major earthquake or other significant emergency in the region. The resulting procedures are tested on an annual basis through tabletop or functional exercises. The procedures have also been integrated into individual operator emergency plans so that the regional response can be automatically invoked, if needed.

The City, in cooperation with MTC, also has plans that address immediate emergency transportation needs, and the day-to-day transportation routes that will need to be reinstated in order for the region's activities to resume. The Transportation Coordination and Recovery Plan (TCRP) focuses on emergency transportation, evacuations, and the movement of emergency workers. The Regional Transportation Emergency Management Plan (RTEMP) addresses how agencies will coordinate with each other to assist with the movement needs of the public following a major disaster. Together, the two plans are expected to result in a single, unified program to direct the region's transportation resources.

OBJECTIVE 4.3.

CITYWIDE COOPERATION. **CREATE PROACTIVE PLANS AND PROGRAMS TO PREPARE READINESS AND COORDINATION FOR ALL DISASTERS.**

Emergency Management

POLICY 4.3.1.
Bolster the Department of Emergency Management's role as the City's provider of emergency planning and communication, and prioritize its actions to meet the needs of San Francisco.

The Department of Emergency Management (DEM) has responsibility for developing the City's Emergency Response Plan, annexes, and other emergency plan elements; supporting the coordination of the response and recovery agencies; providing emergency training opportunities; conducting and advising on functional and discussion-based exercises, coordinating activities with regional, State and federal agencies; and maintaining the Emergency Operations Center. This agency must be maintained at an appropriate level, with sufficient personnel and resources to carry out these tasks.

The agency also manages Homeland Security Grants disbursed by the federal government. In recent years, the City has been the recipient of a significant amount of homeland security funds, most of which were targeted for urban centers. In the future, DEM should work with the state to improve its homeland security spending, to ensure that grant money can be effectively utilized and will not revert back to the federal government.

POLICY 4.3.2.
Support the Emergency Operations Center and continue maintenance of alternative operations centers in the case of an emergency.

The City's Emergency Operations Center (EOC) is designed to serve as a secure well-equipped location for centralized communications and direction. This center houses the Department of Emergency Management, including its Division of Emergency Communication, and consolidates 911 calls and Fire, Police, and Medical Dispatch. It is managed by the Department of Emergency Management.

However, emergency centers may be destroyed or rendered inaccessible in a major catastrophe. The City should prepare for this possibility in advance, by ensuring duplication of information and systems in multiple locations, by identifying alternative sites for temporary EOCs, and by establishing a mobile command center with the necessary technology and information infrastructure for flexible operations.

POLICY 4.3.3.
Ensure all response plans are coordinated with the Disaster Council.

The San Francisco Disaster Council is the City's central body for emergency planning, and it has been accredited by the California Emergency Council. The Disaster Council is codified by the San Francisco Administrative Code, Chapter 7. The Disaster Council is chaired by the Mayor and composed of the Director of Emergency Services, key department heads and City officials, three members of the Board of Supervisors, and representatives of private organizations having official emergency responsibilities. The Council reviews the efforts of the Emergency Response Planning Task Force and recommends emergency actions such as mutual aid plans and for adoption by the Board of Supervisors.

In order to coordinate the actions of the various agencies throughout the City, the Disaster Council should serve as a central repository for all hazard mitigation, preparedness, and response and recovery activities. The Disaster Council, through its contact with the State Emergency Council and the several local disaster councils within this metropolitan area, can ensure that the work of the City is coordinated with those of the surrounding region. All actions recommended by the Safety & Resilience Element, and developed in other efforts or documents, should be brought forth to the Disaster Council for their review and approval.

POLICY 4.3.4.
Maintain and implement a comprehensive, current Emergency Response Plan with neighborhood-level detail on equitable implementation to guide the response to disasters.

The Emergency Response Plan (ERP) ensures that the roles of City agencies and others are well defined, in compliance with applicable state and federal regulations. The ERP utilizes an all-hazards approach to emergency planning and encompasses all natural and human-made hazards applicable to the City. Specifically, the ERP identifies and describes City interactions with regional, state, and federal entities; the role of the San Francisco Emergency Operations Center (EOC); and the coordination that occurs between the EOC and City agencies. The ERP should include the responsibilities of Equity Officers and neighborhood-level planning to ensure equitable outreach. There should be periodic functional and discussion-based exercises of the ERP to test plans and identify gaps in emergency management practices.

POLICY 4.3.5.
Maintain and implement the San Francisco Disaster Debris Management Plan.

The City's Emergency Response Plan includes a response strategy, identifying post-disaster debris management as a key function. The Post Disaster Debris Management Plan establishes a strategy for removal and disposal of disaster debris. Designating appropriate temporary and permanent disposal sites as part of this plan is critical for long-term land use planning.

Post-disaster, the Plan aims to incorporate existing waste ordinances, diverting as much waste as possible from landfills though reuse and recycling. All vegetative debris should be composted; metals should be recycled; other wastes should be separated and reused or recycled wherever possible. Disaster recycling programs seeks to follow the City's recycling program already in place, so as not to require new permits or other legal permission to be developed. The City should develop clear guidelines to direct businesses and residents as they deal with their own debris and trash removal after the disaster.

Communications

POLICY 4.3.6.
Utilize advance technology to enhance communication capabilities in preparation for all phases of a disaster, particularly in the high-contact period immediately following a disaster.

Reducing the impacts of natural and technological hazards requires extraordinary cooperation and coordination among City agencies, and between departments and other governments and non-government agencies. During the immediate response period, the City will need to determine the extent and location of damage, marshal resources for response, provide information to the public, and provide critically needed services to the affected populations. The Division of Emergency Communications of the Department of Emergency Management maintains responsibility for coordinating communication among emergency responders, private partners, and people in San Francisco to ensure an effective and successful emergency operations system.

The City currently uses technologies such as geographic information systems and global positioning to allow wide access to everyday information, and is extending these networks to enhance disaster communication. The City has developed an emergency text-message alerting system, AlertSF, which delivers disaster notifications to registered users, and allows users to access neighborhood specific information. It has reestablished the World War II-era sirens to provide alerts, and it is further upgrading the system to broadcast voice instructions for responding to an emergency. There is the 311 City phone service, where callers will get assistance from an agent 24 hours a day, 7 days a week, and will provide real-time instructions during an actual emergency.

Continuing advances in technology and information systems will enable information to be more widely, quickly, and reliably. Under the direction of CalOES, the City should keep abreast of these advances and utilize them to bolster the existing local information network. The Department of Technology and Office of Economic and Workforce Development should explore opportunities to use technology to

keep all people informed during an emergency, using the full potential of rapid, online, and offline communications mediums. The City should ensure redundant networks exist to communicate at all levels, to internal staff and emergency response personnel, to convey public information, to ensure communication with special needs populations such as the hearing impaired or non-English speakers.

The City should explore work to improve inter-departmental communications during a disaster. The City's police, fire and most other agencies are on the same radio system, but other agencies such as the City's Municipal Railway and the California Highway Patrol use separate systems. The City should work internally to coordinate the radio frequencies used for its various agencies to aid smoother communications during a disaster. The public safety agencies throughout the Bay Area use a varied network of radio frequencies and equipment, making direct intercommunication difficult. The City should also coordinate with other municipalities to coordinate frequencies across the Bay Area, perhaps using a model similar to that used by the San Diego area, where a regional radio communications network links all of the areas public safety agencies.

POLICY 4.3.7.
Enhance communications with other jurisdictions.

Local Emergency Planning Committees (LEPCs) are regional entities set up to enhance coordination among adjacent municipalities. LEPCs are comprised of representatives from local government, the fire service, law enforcement, the local community, and industry; and they are intended to facilitate the coordination and flow of mutual aid. CalOES Coastal Regional Branch-Mutual Aid Region 2 is the LEPC for the San Francisco Bay Area and nearby counties.

The City is acting as the lead agency to develop a Regional Emergency Coordination Plan (RECP) to help the Coastal Region CalOES address gaps in regional emergency plans. The plan will detail how the communities which make up the LEPC will work together on evacuation, housing and transportation of displaced people. It also will outline how medical professionals will interact and how to cope with threats to the water supply, among other issues. Once complete, the City should utilize this plan as a basis for emergency operations issues that transcend City boundaries, such as emergency transportation, evacuation, and the movement of emergency workers.

Public Safety

POLICY 4.3.8.
Plan to address safety and violence issues that may arise post-disaster, and balance these issues with the other demands that will be placed on public safety personnel as emergency response providers.

Violence in the community, including looting and rioting, can occur in the aftermath of disaster. Desperate situations, such as being without food or being stranded with no expectation of rescue, can lead to despair and risky personal actions. Experts state that perceptions of widespread community violence are often based on misinformation, citing human tendency to misread crowds as more malevolent than they really are.

The Centers for Disease Control recommends that efforts to prevent violence after a natural disaster should focus on supporting the physical and emotional needs of individuals and families as well as restoring community-based services. De-escalation training should be provided to all City employees and volunteer emergency responders. San Francisco recently started a program called, Street Crisis Team, that sends Fire and Health teams to respond to behavioral issues, instead of police. Similar programs should be pursued to prioritize the deployment of police officers for interventions where they are most needed.

During a disaster, police will be needed for public safety including activities such as search-and-rescue activities, directing traffic, or dealing with other emergency duties. Police response must be coordinated so that it can respond to both social and physical needs in the face of disaster. Law enforcement agencies, including the San Francisco Police Department and the Sheriff's Department, District Attorney's Office, agency forces such as San Francisco Municipal Railway Police Department, and institutional agencies such as the San Francisco Community College District Police Department, should work to ensure better organization among agencies, so that their magnitude can be leveraged towards the many services that will be required. The City should also maintain relationships with state and federal level peacekeepers that may be needed in an emergency, such as the Coast Guard and National Guard. Finally, security forces should establish communication with Disaster Service Workers to mobilize civilians if necessary to support their efforts.

Partnerships

POLICY 4.3.9.
Develop and maintain mutual aid agreements with local, regional, and state governments as well as other relevant agencies.

Many state and local governments and private nonprofit organizations enter into mutual aid agreements to provide emergency assistance to each other in the event of disasters or other crises. The California Master Mutual Aid Agreement has been adopted by the City, as well as most cities and counties in the state. This agreement creates a formal structure for giving and receiving assistance in emergency situations. The City should expand its network of mutual aid beyond local governments to include relevant agencies such as transit providers, utilities, volunteer agencies and professional organizations for groups like health workers and emergency managers. Numerous agencies and businesses may have resources—facilities, trained staff, transportation or equipment—that can be valuable in emergencies. The City should pursue Memorandums of Understanding or other contracts with any local agencies or businesses that can be identified as resources, including the Unified School District. Discipline-specific mutual aid agreements, such as those for public works, engineering, or public information, may also be useful.

POLICY 4.3.10.
Continue coordination with water transit agencies, ferries, and private boat operators to facilitate water transportation as emergency transport.

Water transit can provide vital transportation support in response to a natural or human-made disaster. Following the 1989 Loma Prieta Earthquake, ferries were heralded for providing much-needed commute service and moving goods. Commercial boats can supplement the role of ferries in evacuating people and provide transit to emergency personnel and equipment in reaching disaster sites.

Vessels must be quickly deployed where most needed, and the response needs to be coordinated with land transit providers to get evacuees to/from the shoreline. The Trans Response Plan (TRP) includes a Regional Maritime Contingency Plan, which aims to establish this coordination through its guidelines and procedures for utilizing the Bay's waters in the recovery phase of a major disaster.

The Water Emergency Transit Authority (WETA) manages the Emergency Water Transportation System Management Plan which lays out emergency response and communication procedures in the case of an emergency. WETA also has plans to add seven new routes through its Ferry Implementation and Operations Plan, and will add a number of new boats and terminals. The increase in capacity gained by these new improvements would allow the Bay Area's ferries to carry over 20,000 trips per hour during a response to disaster, which is almost the evacuation capacity provided during the Loma Prieta earthquake by ferries. The City should support these plans and should ensure coordination is in place. While existing public transportation ferry services within the Bay Area are being transitioned to WETA management and ownership, the City should coordinate with private operators not yet transitioned to WETA, with the aim of establishing emergency aid agreements for the boats as well as the operators in the case of need.

POLICY 4.3.11.
Ensure the City's plan for medical response is coordinated with its privately-owned hospitals.

The Department of Public Health is the City's lead health response agency in the event of a hazard that leads to a major health emergency. They should continue efforts to coordinate with Bay Area private hospitals, community-based clinics, and community-based organizations in the Bay Area.

POLICY 4.3.12.
Develop agreements with private facilities to ensure immediate supply needs can be met.

Supplies that may be critical and in short supply after a disaster include food, water, medical supplies. Hospitals and service providers may also have difficulty in obtaining replacement equipment and medication. The City should coordinate agreements with private facilities such as hospitals, private schools, and warehouses to ensure that reasonable quantities of these necessities can be made available to the City and its people in case of a disaster. The City should also maintain its up-to-date list of rental agreements, for use of temporary supplies and facilities should they be necessary.

POLICY 4.3.13.
Develop partnerships with private businesses, public service organizations and local nonprofits to meet disaster-time needs.

The City should seek opportunities to partner with private sector businesses and organizations where possible. For example, drug stores can be used to distribute medical supplies and pharmaceuticals during emergencies. Medical institutions and university health centers can be set up to provide medical treatment such as inoculations in the event of a chemical or biological emergency.

Private and community-based organizations can assist with recovery activities, and in the dissemination of disaster information. The American Red Cross, Habitat for Humanity, Salvation Army, as well as numerous local groups, can be supportive partners in providing emergency shelter, food, clothing, and physical and mental health support. The City's relationships with these agencies and organizations should be mutually supportive. Local services, particularly in lower-income areas, such as food banks, senior centers, childcare centers, may be ill-prepared to cope with disaster. The City should assist in developing support networks for these organizations, providing them with employee response training, assisting them in securing insurance coverage and helping to develop contingency plans for their continued operations post-disaster.

OBJECTIVE 4.4.

GOVERNANCE AND COLLABORATION. INCREASE THE CITY'S COLLECTIVE CAPACITY TO IMPROVE SAFETY AND RESILIENCE OUTCOMES THROUGH EFFECTIVE COLLABORATION AMONG PEER AGENCIES, THE PRIVATE SECTOR, AND THE PUBLIC SECTOR.

POLICY 4.4.1.

Develop centralized strategies for City safety and resilience functions that hold individual agencies accountable for their roles in disaster planning, coordination, decision-making, funding, cost-sharing, implementation, and risk allocation.

The City must be prepared to deliver life safety and functional recovery services at all times. Beyond basic life-safety functions, critical government programs need to continue in the aftermath of disaster. While it is incumbent on each City agency to do their own planning, centralizing plans across departments is needed to ensure that efforts by individual departments complement each other and provide a continuous service to the public. These centralized strategies need to systematically ensure advanced planning results in the proper preparation activities, disaster response activities, and adjustments necessary for life safety and functional recovery. These strategies must also include securing dedicated funding essential to a sustained effort with program longevity and consistent engagement and outreach to connect with the private and public sectors.

POLICY 4.4.2.

Align safety and resilience work by regional, state, federal, and tribal government bodies to expand the reach and strength of local government support in the face of all hazards.

Actions that the City take should be consistent with regional, state, and federal plans and projections. the City should take steps to assist these larger governmental agencies in meeting local needs. The City can pursue cooperative actions with other jurisdictions such as recommending localized and evidence-based strategies, exploring policy advocacy and funding opportunities for alignment, and developing mutual aid agreements.

POLICY 4.4.3.

Form effective and clear partnerships with non-government bodies, such as community organizations, institutions, private companies, and development partners to reach all people, especially Environmental Justice Communities and other vulnerable people.

When a disaster strikes, the "all hands on deck" response requires advance collaboration and partnerships across agencies, sectors, and jurisdictions. The overall response provided by government agencies, the private sector, and the public sector must be evidence-based, timely and proportional, multi-objective, and well measured and quantified. The long-term capacity-building partnerships with major institutions, like hospitals and universities, private development partners, and community-based organizations, will support response, recovery, and reconstruction activities meeting the highest resilience strategies.

The response, recovery, and reconstruction strategies must be based on strong, local evidence in order to reach all people at the neighborhood-by-neighborhood or block-by-block level. The strategies must be acutely aware that the climate crisis is an emergency that is already impacting communities and the environment, and so there is urgent and transformative actions needed. The strategies must be developed around racial and social equity and long-term sustainability, and they must be tracked as close to real-time as possible, so that adjustments and recalibration can be made in an informed way.

Goal 5. Response

Provide San Francisco residents, workers, and visitors with the essential support and services needed immediately following a disaster for life safety and functional recovery. The first days after a disaster make up the response phase. Immediate response will focus on saving life and property damaged by the disaster and restoring functional recovery. The City has a network of emergency response strategies in place. The response activities will provide aid for the community, stabilization of day-to-day conditions, and support reestablishment of the critical economic welfare, social networks, and emotional well-being of the City.

OBJECTIVE 5.1.

LIFELINES. PROVIDE CRITICAL INFORMATION AND SERVICES TO PREVENT FURTHER LOSS OF LIFE AND ESTABLISH COMMUNITY SAFETY DURING THE IMMEDIATE AFTERMATH OF DISASTERS.

POLICY 5.1.1.
Ensure the City's lifeline systems are constantly maintained to be in a state of good repair.

In 2010, the Federal Transit Administration (FTA) launched an initiative to maintain the nation's bus and rail systems. With state of good repair, there are well maintained and reliable bus and rail systems that provide safe, dependable, and accessible services at a full level of performance. These initiatives include having an inventory of all assets; reporting their performance and performance restrictions; and managing assets for preservation, maintenance, and operation.

As example, the transportation system is infrastructure essential to disaster response, such as serving as evacuation routes to move people out of harm's way and limit further loss of life. It is important that the transportation system is maintained to be in a state of good repair, meaning it remains in function or can soon return to function immediately after a catastrophic event. The City should coordinate with relevant government agencies, such as Caltrans and Federal Transit Administration, to preserve and expand transportation investments and financing for a well-maintained and reliable transportation infrastructure.

In San Francisco, the City can extend state of good repair principles to all lifeline systems. Lifelines are systems and facilities that provide services vital to the function of society and are important to the emergency response, recovery, and reconstruction after disaster. These systems and facilities include communication (phone, radio, television, internet), power (electric, fuel, gas), transportation (airports, highways, ports, rail, transit), water and wastewater, and more.

To extend to other lifeline systems, the City should pursue an inventory, reporting system, and asset management plan to ensure the City's lifeline systems and facilities are constantly maintained to be in a state of good repair.

POLICY 5.1.2.
Ensure plans are in place to support people most at risk during breaks in lifeline service.

As events have repeatedly shown, from the Loma Prieta earthquake in 1989 to SARS-CoV-2 in 2019, the most vulnerable populations become even more vulnerable when the City is disrupted by disasters. Gaps in transit service can drastically impact immobile populations such as the elderly, low-income, and medically fragile, especially in terms of their access to medical care. Loss of electrical power can also be a problem for homebound and medically-dependent individuals. Programs to notify officials, especially power providers, of these individual locations should be developed so that patients who may be unable to help themselves during a power outage or any other emergency can get the necessary support, including continuing medical care for chronic conditions and delivery of prescription refills.

POLICY 5.1.3.
Mitigate threats posed by digital hazards, such as terrorism and communication failures, to City systems and infrastructure.

While the City does maintain some risk of terrorism, it is more likely at risk of deliberate acts intended to impact its service and communication networks. Often the objective of such acts is not destruction or death, but disturbance—a visible impact to the City's public services, economies, and social networks. Critical facilities include the City's communication systems, such as its fiber-optic data network and network data, its physical infrastructure, such as its water and power systems. It is important to upgrade public facilities to enhance security, through physical security measures, cyber protection measures, and tight security procedures and policies as technology and practices improve. Redundant networks will help ensure that incidental failures do not have grave impacts.

The communications asset class transmits voice and data communications by cable, telephone, or broadcasting. San Francisco Department of Technology manages a wide array of communications systems, including radio, TV, internet, City internal data network, public warning sirens, emergency call boxes, communication path for traffic signals, and the Mayor's Emergency Telephone Systems (METS). In addition, private communication operators own TV and radio antennas, cell sites, hubs, fiber networks, and switches for TV, radio, internet, cell phone, and voice communications.

The key City-owned systems include the municipal fiber optics network, data centers, and an 800 Mhz radio system.

- **Fiber optics network:** This fiber network provides internet access, email, and VoIP communications. There are hundreds of miles of fiber optic cable connecting every municipal building in San Francisco.
- **Data centers:** The primary data center located in San Francisco stores, manages, and disseminates the data for most of the City's communications systems. A back up data center has been established in Rancho Cordova, CA. There are two separate network paths to Rancho Cordova for redundancy.
- **800 Mhz radio system:** The City is transitioning to a new 800 MHz radio system for emergency communications. The system relies on 11 antennas placed on buildings or high locations throughout the city, with two antennas located outside of San Francisco in Daly City and San Bruno. Most antennas are located on shared radio tower sites on buildings or high ground. The towers are not owned by the City. They are built to the highest seismic standards, but the performance of the buildings on which they are

placed is generally not known. Loss of one or more antennas in the network will degrade communications, but the system is designed so it can remain operational despite loss of several antennas. The antennas are connected to each other by fiber cables and microwave paths. The radio towers have back up power.

The private communications systems are owned by a wide range of operations, including Verizon, AT&T, T-Mobile, and Comcast, as well as private fiber optics networks and data centers that these operators rely on.

POLICY 5.1.4.
Increase communication capabilities in preparation for all phases of a disaster, and ensure communication abilities extend to hard-to-reach communities.

Communication will be necessary and critical to the City in the response phase immediately following a disaster and in the recovery and reconstruction period. The City should have redundant networks in place to communicate at all levels, to coordinate internal staff and emergency response personnel, and to convey public information. The public communication should be equitably disseminated to ensure outreach to special needs populations, such as the hearing impaired or non-English speakers. The communication methods should be culturally competent, address the digital divide, and be independent from reliable cell service, such as outdoor public warning systems.

In addition, existing neighborhood organizations can develop local models that serve the same purpose. Development of a neighborhood communications plan can allow community members to keep in touch with, and keep track of, their neighbors, particularly the elderly or disabled that may be most in need of support during a time of emergency. Elements of this plan could include phone trees, text message trains, and the establishment of physical block captains to perform door-to-door checks if necessary.

The Department of Public Health's Community Response Plan calls for community members and organizations to have the means necessary to be inform policy makers about the damage and critical needs of each neighborhood throughout the City. By having a method for communicating at the neighborhood level, community members will be able to notify officials and seek out help in areas of the City that might be difficult to reach after a disaster.

POLICY 5.1.5.
Develop a system to convey information during and immediately after a disaster.

In addition to conveying general public information about the disaster to people and the outside world, the City will also need to respond to more personal inquiries by impacted people. This can include questions about what services and aid is available, as well as inquiries about the location, health, and welfare of relatives or other community members.

The City should plan for an information system composed of a series of local Public Information Centers intended to convey more personalized information to the public. These centers should be located in accessible community locations, such as libraries, but should also be sited away from the centers of emergency activity, such as lifeline facilities. They can be outdoor public warning systems, centralized online systems, and decentralized offline systems. These centers should be connected to receive up-to-date information from law enforcement agencies, other City agencies, the school district, public shelters, local hospitals, and the coroner, and they should also be linked to regional centers in other parts of the Bay Area. During a disaster, these regional information centers should be directly linked to consumers via the 311 City phone service.

POLICY 5.1.6.
Follow the National Incident Management System (NIMS) procedures in declared emergency scenarios.

A major disaster will entail assistance from beyond the City's borders, potentially involving assistance of other Bay Area jurisdictions, the state of California, and even the federal government. To coordinate this assistance, the federal government has developed a national approach to incident management, called the National Incident Management System (NIMS), to act as the common language and procedural guide bridging different entities. NIMS was developed so responders from different jurisdictions and disciplines could talk to each other in a common language and work together better to respond to natural disasters and emergencies, including acts of terrorism. NIMS uses a systems approach to integrate the best of existing processes and methods into a unified national framework for incident management. Its concepts and practices cover incident management; standard command and management structures; and emphasis on preparedness, mutual aid, and resource management.

The City's various agencies, particularly those who are its first responders, are already familiar with the NIMS system and utilize its framework in the development of emergency response and other plans. The City should continue this practice, and ensure it is kept up-to-date with current NIMS practices. New approaches that will improve effectiveness are likely to result in refinement of the NIMS over time, so the City should maintain an awareness of any changes and incorporate them into its response planning and practices.

POLICY 5.1.7.
After an emergency, follow the mandates of the Emergency Response Plan and Citywide Earthquake Response Plan.

The Emergency Response Plan directs the City's actions after a disaster, assigning responsibility to agencies and departments. Many of the immediate actions needed to begin the recovery process are described in the Emergency Response Plan, such as debris removal, emergency building assessment and repairs, and meeting the immediate needs of federal and state agencies for information.

The Citywide Earthquake Response Plan supports this plan by providing response actions for the incident of an earthquake. Both plans should be used to guide all responsibilities and activities in the case of a disaster.

OBJECTIVE 5.2.

COMMUNITY PARTNERSHIPS. WORK WITH NEIGHBORHOOD-BASED ORGANIZATIONS AND TRUSTED PARTNERS TO EXPAND DISASTER RESPONSE ACTIVITIES ACROSS THE CITY.

POLICY 5.2.1.
Work collaboratively with nonprofit and community partners to assist Environmental Justice Communities and other vulnerable people during and immediately after a disaster to ensure resumption of social services.

In addition to disrupted infrastructure, such as transit and transportation, power, water, gas and sewer, phone service, the City will also face disruptions to its social services at a time when they may be most needed. The City's most vulnerable populations will be at risk of service disruption and delayed resumption, including seniors, people with disabilities and other functional needs, institutionalized or incarcerated people, youth who have been separated from their families due to the disaster, and residents of single-room occupancy hotels and public housing. Hospitals and clinics may be damaged or overcrowded, schools and daycare centers will be closed, and families may be separated. Centers for special needs populations may be temporarily shut down, due to damage or unavailability of employees. Local services, particularly those meeting the needs of low-income residents, may be ill-prepared to cope.

The City should have continuity policies and plans in place for its services. One way of supporting their immediate resumption would be to establish a policy clarifying that for specified City employees, their primary role as Disaster Service Workers is to carry out their everyday positions in social service provision. In advance of a disaster, processes should be established to ensure the continuity of payments to social service organizations under contract with the City.

The City is not, however, the only service provider that needs to plan for disasters. The City should assist local service providers so that they can resume services immediately following a disaster, including mental health centers, substance abuse services, homeless shelters, community health centers, and senior services. But in past disasters, lack of coordinated planning—between the City and among agencies—has resulted in gaps in aid or in redundant services.

Community-based organizations and neighborhood-level emergency planning efforts should plan for disasters and be in coordination and partnership with the City. Nonprofit groups are key players in disaster response, providing food and shelter in the short-term and assisting in longer-term recovery through services such as health care and job placement. In advance of disasters, the City can support community-based organizations by providing them with employee response training, insurance coverage, encouraging development of contingency plans, and offering opportunities for financial resources.

POLICY 5.2.2.
Identify and retain vendors and contractors to be readily available to respond immediately after a disaster.

When a disaster strikes, there will be a strain on needed goods and services, such as shelter, food, and waste removal. One way to address the urgency of post-disaster needs is to make arrangements with local and regional contractors before disaster strikes. Pre-qualifying of contractors who can respond in emergency scenarios and who have equipment to handle the work is another solution for immediate response.

The Office of Contract Administration maintains an emergency list of supply vendors. The Office should work with other departments to understand the types of supplies that may be necessary in the case of a disaster and have contracting options readily available, including an up-to-date list of qualified contractors. The list should contain sufficient sources for the kinds of goods that will be most in demand after a disaster—tents, food, etc. As-needed contracts should be readily implementable to meet emergency need, and existing contracts and franchise agreements should be reviewed for their applicability in the case of a disaster.

Public Works maintains a registry of construction-related contractors. This list can be a valuable resource after a disaster. The agency should ensure it is kept up-to-date, and that old or unavailable contractors are removed on an annual basis. The City should also explore methods that will enable small and local firms, including minority- and women-owned businesses, to take a more active role in the response and rebuilding process, it may be beneficial to develop a program to train and qualify local contractors for government-backed projects.

POLICY 5.2.3.
Develop and implement plans to accept, train, organize, and utilize volunteers in the delivery of basic emergency management tasks.

Post-disaster, it is likely that the City will see an outpouring of people willing and wanting to help with recovery efforts. The mobilization and reinforcement of these resources will require significant management by City responders. If no system is in place to harness the potential provided by these spontaneous, or "convergent," volunteers, this resource will be lost. Volunteers are convergent when they are unexpected, typically community members who wish to render aide following a large-scale emergency.

During the City's COVID-19 efforts, the Department of Human Resources (DHR) established an Emergency Volunteer Center (EVC) where it credentialed over 1,000 volunteers in the State's Disaster Service Worker Volunteer Program. DHR deployed over 600 of those volunteers to perform volunteer services with the Department of Public Health. The City should ensure that the lessons learned from its COVID-19 volunteer management and response efforts are incorporated into a revised plan for organizing and mobilizing convergent volunteers. This revised plan should encourage working in concert with the City's ongoing disaster service volunteer programs, such as the Neighborhood Emergency Response Team (NERT).

POLICY 5.2.4.
Develop strategies for cooperating with the media.

Having a media communication strategy is an important component of responding to a disaster. Beyond communicating locally and to the region, the media is the means by which the outside world understands what has happened. Media coverage leads to national, and potentially global understanding, of a disaster and its impacts. Media coverage can be a primary factor in attracting public and private aid. It can fuel demands for action and stimulate public support for actions to prevent or mitigate future disasters.

The Mayor's Office of Communication will direct all high-level strategic messaging regarding the City's overall emergency response. The Joint Information Center (JIC) will integrate Mayor's Office of Communication strategic messaging into the myriad of communications produced within the JIC, including media responses, public information alerts and notifications, and proactive social and traditional media content. The Mayor's Office's crisis communications plan should include strategies for openly and honestly dealing with the media. Procedures for disaster media relations should also ensure that the designated spokesperson—and in the case of a disaster, this may not be the usual media spokesperson—understands the depth of the disaster and the details of its impacts. Media kits should be prepared and ready for distribution as soon as possible.

There are frequently concerns about the negative impact of media coverage on a community post-disaster. Because of the nature of media, stories can often be overtaken by a focus on deaths and damage to property. Political leaders may be concerned about the negative publicity's impact on tourism and external investment, or fear that it could incite mass departure of business and residents. Even in the face of these fears, it is important that the City take a positive view of media operations and cooperate with the media based on a policy of openness.

Rather than restricting information, the City should work to present media organizations with a balance of information about the kinds of public actions and safety measures that have succeeded, as well as those that have failed, so that coverage can go beyond simply accounting for totals of loss. A news story focusing on the amount of earthquake damage inflicted could just as easily include information about the number and types of structures that survived because of hazard mitigation measures, and provide information about shelter locations, response and recovery efforts and priorities, and more.

OBJECTIVE 5.3.

HAZARD-SPECIFIC RESPONSE. ADDRESS ANY SPECIFIC, SHARED, OR COMPOUNDING NEEDS FOR COMMUNITY SAFETY IN THE AFTERMATH OF A DISASTER.

POLICY 5.3.1.
Establish a plan to facilitate the continuity of permitting services in the case of a disaster for building repairs and other essential permitting services.

Rebuilding the City post-disaster can be facilitated by increasing the points of access where permitting can occur. With certain hazards, it can be challenging and infeasible to maintain permitting continuity through the San Francisco Permit Center's in-person services. The City can offer a fully digital permitting platform and satellite, in-person permitting centers to offer one-stop City permitting services such as Building, Public Works, and Health permits. Through these accessible modes, permitting can increase building owners' access to services for their recovery planning and can reduce the possibility of overload at the central permitting facilities at the Planning Department and the Department of Building Inspection.

The City should develop a fully digital permitting process to be nimble in its continuity of permitting services and remote staffing capabilities in the event of a disaster. The digital platform can support the permitting roles and responsibilities across City agencies, such as the Planning Department, Department of Building Inspection, Public Works, and the Department of Public Health. These satellite centers can be operated on a temporary basis, perhaps until a targeted number of buildings are brought back online. Depending on the hazard and level of damage, the network of satellite centers may depend on building and outdoor safety, ability to congregate, or staffing availability.

POLICY 5.3.2.
Ensure historic resources are protected in the aftermath of a disaster and support post-disaster restoration of damaged historic buildings.

Preservation of the City's historic resources is an immediate concern when damage is being assessed. The older construction techniques of historic buildings make them more vulnerable to damage, and if the damage is noted without recognition of the resource's historic value, the building can be at risk of further damage or demolition. Having complete and accurate information to document historic resources is fundamental to ensuring they are not lost. This information can be mapped and used by assessors in the tagging of buildings post-disaster.

The Planning Department has been actively engaged in survey work through the Citywide Survey Program. The focus of the program is on neighborhoods that are undergoing long-range planning efforts or are the focus of intense development activity. The Citywide Survey Program will continue survey efforts in neighborhoods outside of Area Plan study areas as resources become available. While that Citywide Survey is underway, the City should make use of existing survey information, including privately developed property reviews, and ensure it is made available to the Department of Building Inspection and any other relevant contractors who may be charged with doing evaluations of damaged buildings.

Post-disaster assessment should include an analysis of the extent of damage to historic areas and resources. In a typical assessment scenario, assessors will attach a green tag if a building is structurally sound, a yellow tag where repairs are needed, and a red tag if the structure is uninhabitable. This system should ensure sufficient protection for historic resources post-disaster, in that all tagged buildings receive more detailed evaluation that considers survey information before any steps towards demolition are taken. The system could also include separate placards identifying the building as a historic resource. Without such identification, the buildings are at risk.

POLICY 5.3.3.
Address hazardous material and other spills by requiring appropriate clean up by property owners, per local, state, and federal environmental laws.

Spills, leakages, and releases of hazardous waste and substances can cause severe damage not only to the environment, but to public health. This is a particular issue for older industrial properties with historic contamination issues, as they convert to other uses or forms of development. In cases where environmental damage or hazardous spills have occurred, the City shall require all property owners and other responsible parties to report and to perform clean up to the level required by local, state, and federal environmental laws. Where such parties delay in this required clean up, the City, working with other regulatory agencies, shall take all measures necessary to ensure public health and safety is protected.

Goal 6. Recovery and Reconstruction

Rebuild San Francisco's built, natural, and social assets and communities towards a more equitable and resilient future. Short-term recovery actions—ensuring reconnection of utilities and services, temporary housing—are often an outgrowth of the response phase. Long-term recovery begins once many of those short-term actions are underway or have been completed—as the rubble and debris have been cleared, major services are restored, and daily operations are reinitiated. The actual reconstruction phase typically takes 5 to 10 years, but it can be much longer. Even across the City, full recovery—return to or improvement beyond the pre-disaster state—can vary considerably from neighborhood to neighborhood. Some areas might be best repaired and rebuilt similar to their pre-disaster conditions, while other areas with pervasive damage may need new area plans applying citywide objectives. Advance planning will improve the City's ability to make decisions quickly and equitably. Longer-term recovery and reconstruction decisions will need to be made by decision makers—including the Mayor, the Board of Supervisors, the Planning Commission, and others—with considerable public involvement by the people most impacted by hazards and their consequences.

OBJECTIVE 6.1.

BUILDINGS AND INFRASTRUCTURE. **MAXIMIZE THE OPPORTUNITIES TO RESTORE AND REBUILD THE BUILT ENVIRONMENT WITH RESILIENCE TO ALL HAZARDS.**

Housing Security and Justice

POLICY 6.1.1.
Support actions to mitigate the spread of homelessness pre-disaster and increase the likelihood that the City's stock of lowest-cost housing will survive post-disaster.

Individuals and families experiencing homelessness have high exposure to risks and are especially vulnerable to hazards. They lack adequate shelter and protection from harm. Post-disaster, especially for catastrophes with potential to destroy housing, the City's existing shortage of affordable housing will be exacerbated. A significant portion of the City's affordable housing stock are provided by some of the neighborhoods most vulnerable to serious damage in an earthquake. Much of the City's lower-cost housing is provided through older buildings, which are more likely to sustain damage in the case of an earthquake. Many of these older units are kept affordable through rent control. Through state-mandated vacancy decontrol, the rent of rent-controlled units may be increased when the unit is vacated, and the unit does not have to be restored if the unit is replaced. Without action, sea level rise and flood hazards may increase risk in lower-cost housing in Environmental Justice Communities. These conditions are likely to exacerbate homelessness and displacement post-disaster.

Damaged affordable housing units and single-room occupancy hotels should be repaired as expediently possible, and if necessary, replaced on a one-to-one basis. Cooperation among the private market, nonprofit agencies, and local, state or federal government sources should pursue achieving a similar level of affordability as units are replaced or made resilient to future hazards. Eviction regulations in the post-disaster period should ensure the disaster is not misused to remove tenants with lower rents.

Pursue policy advocacy at the state and federal levels to enable eviction moratoria and rental relief during disasters, such as the eviction moratoria during the COVID-19 pandemic. This relief should be available to vulnerable people, property owners, and businesses who are displaced by disasters and to facilitate their right to return. In the wake of a disaster, it may be difficult for residents, especially renters, to demonstrate proof of residency and liaise with landlords and property owners. The policy advocacy should identify inclusive eligibility criteria, robust funding sources, and have limited barriers to accessing the relief.

POLICY 6.1.2.
Provide adequate interim accommodation for residents and businesses displaced by a major disaster in ways that maintain neighborhood ties and cultural continuity.

While the City's first priority should be to encourage and enable the retrofit of residential buildings, to minimize damage and allow residents to shelter-in-place following a disaster, the Department of Emergency Management estimates that after a major earthquake, between 20,000 to 90,000 housing units may be destroyed or substantially damaged. Many businesses that provide necessary services to residents will also be displaced. The Care and Shelter Plan establishes a framework for the provision of emergency shelter for the general population. The Care and Shelter Plan should be expanded to accommodate people experiencing homelessness at the time of disaster. Currently, no specific agency is tasked with the responsibility of interim housing, nor with finding temporary space for displaced businesses. Future implementation plans should address these issues.

The City should designate a lead agency to plan for interim housing and business needs. This agency should work in collaboration with state and federal agencies to consider City goals and advocate for the affected communities. To maintain relationships and connections within the community, interim housing and other facilities should prioritize keeping residents in their neighborhoods and near their pre-disaster homes as much as possible.

POLICY 6.1.3.
Repair damaged neighborhoods in a manner that facilitates resident return and minimizes long-term displacement, prioritizing Environmental Justice Communities and other communities disproportionately impacted by housing disparities.

San Francisco neighborhoods have distinct characteristics, and often have long-term residents, businesses, and institutions. Many neighborhoods have distinct cultural identities and provide the bonds of community for their residents. The City, in cooperation with state and federal agencies and community-based organizations, must manage rebuilding to minimize long-term displacement, retain neighborhood cohesion, and expand housing opportunities for communities disproportionately impacted by housing disparities.

As such, plans should provide opportunities for those who lived in the area to return to new or repaired homes and other facilities there. The City should explore methods of providing return rights to tenants that must vacate their unit because of reconstruction, renovation, or improvement. These methods may include the "right-to-return," down payment assistance, lottery preference, and other financial assistance that would relate to accessing private market, below-market-rate housing, and public housing.

POLICY 6.1.4.
Protect individuals and families experiencing homelessness in the wake of disaster.

Homelessness, and the risk of becoming homeless, will be exacerbated by hazards. The 1989 Loma Prieta earthquake damaged homeless shelters and numerous single-room-occupancy hotels that were an important source of housing for the very poor.

In preparation for disasters, the City should inventory its stock of homeless shelters, single-room-occupancy hotels, and transitional living facilities. The City must ensure its post-disaster plans consider major social issues like homelessness. With many properties destroyed or uninhabitable, it will be even more difficult for this challenged population to find suitable housing after an earthquake. Transition to long-term shelter will be needed for those already homeless, requiring long-term aid and greater assistance than is typically required by disaster victims. When a disaster strikes, it can be traumatizing to a community already disproportionately impacted by mental health. The City should pair long-term shelter and aid with comprehensive, evidence-based systems that offer a continuum of care, such as mental health and substance abuse care, social work, and other supportive systems.

POLICY 6.1.5.
Ensure sufficient affordable housing and workforce housing during reconstruction.

Lack of housing can have a severe impact on economic recovery. If the labor pool has nowhere to live, they are unable to work. Limited housing opportunities, particularly for low-income communities and low-wage workers, can curtail the available labor pool for construction activities during rebuilding, and the absence of permanent housing once businesses have come back online may cause local employees to seek work elsewhere.

The City should partner with the business community in restoring workforce housing for the community after a disaster. The most useful assistance local businesses can provide may be financial contributions, whether they are at-large contributions coordinated by the City or direct subsidies offered to their own workers. Some possible methods include the development of employer-directed community land trusts or rental deposit and down payment grants for displaced workers.

Reinforce Hazard Mitigation

POLICY 6.1.6.
Encourage continued and adaptive reuse of San Francisco's existing building stock, including those with architectural and historical merit, to reduce greenhouse gas emissions that may otherwise occur from new construction.

Post-disaster, the City should prioritize the repair and rehabilitation of existing buildings. As feasible, existing buildings should follow life safety and functional recovery standards, and then, be recovered as close as possible to pre-disaster conditions and use. This repair and rehabilitation of existing buildings, as compared to new development, will mitigate greenhouse gas emissions, especially when reinforcing climate mitigation principles.

In addition to those with architectural and historical merit, existing bodies contain embodied energy, and thus, their preservation can be a sustainable practice when compared to new construction. The practice of reuse can reduce or completely eliminate greenhouse gasses that are emitted as the result of demolition, manufacturing and transport of building materials, and new construction—the greenest building is one that is already built. Furthermore, less environmental strain is caused from the reduced extraction of natural resources from materials development and reduced solid waste from demolition. Promoting the reuse, rehabilitation, and restoration of existing buildings can thus help to reduce the City's carbon footprint, serving as a valuable climate mitigation technique.

POLICY 6.1.7.
Apply sustainability practices in rebuilding projects, consistent with the City's Climate Action Plan and greenhouse gas emissions reduction targets.

Particularly with large-impact earthquakes, buildings and infrastructure may be compromised or destroyed. Salvaging their materials not only aids in reducing the amount of debris going to a landfill and reducing air quality emissions associated with demolition, it also contributes to the local economy and supports the rebuilding process. The City should support the establishment of new businesses that can reclaim, warehouse, and resell salvaged materials. The City should also provide incentives to promote incorporating salvaged materials in construction.

One way the City could support a market for these materials is to develop policy that requires rescue and reuse of salvaged materials in new development and rebuilding projects. The City has many green building requirements already in place that should be reconsidered and perhaps expanded in light of projected post-earthquake rebuilding needs.

POLICY 6.1.8.
Ensure equitable outcomes in the consideration of design character and quality in all rebuilding projects.

A disaster may damage many of the neighborhoods and buildings that contribute to the City's urban design character, and it is imperative that reconstruction be done in a way that will strengthen urban design character, as the city continues to grow and evolve. The City's attitude toward rebuilding will have to balance sometimes competing objectives—the need to rebuild quickly, the need to rebuild equitably and with robust input and participation of the affected communities, and the desire to maintain or improve design character. All reconstruction should be centered in racial and social equity and should follow the framework put in place by the post-disaster recovery and reconstruction plan, as well as the urban design standards and design guidelines already in place in the city.

It is important that large-scale rebuilding does not succumb to the political pressure of property owners to rebuild, at the sake of important interests in racial and social equity, community participation and engagement, urban design, historic and cultural preservation, and hazard mitigation and resilience opportunities. While other policies speak to the need for timeliness in reviewing reconstruction projects, the policies developed must ensure humane outcomes for vulnerable communities and that design character and quality are not ignored in the urgency of rebuilding.

OBJECTIVE 6.2.

ADVANCE RECOVERY PLANNING. COMPREHENSIVELY PLAN FOR THE RESTORATION OF CITY FUNCTION AND ECONOMIC ACTIVITY, WITH FLEXIBILITY TO KNOWN AND UNKNOWN HAZARDS.

POLICY 6.2.1.
Before an emergency occurs, establish an interdepartmental working group to develop an advance recovery framework that will guide long-term recovery, manage reconstruction activities, and coordinate expedient rebuilding aligned with City policies.

Advance recovery planning is critical role for the City's resilience. A framework for recovery and reconstruction can expedite decision-making based on already agreed-upon priorities and goals. The City's history of disaster has proved that pressures for speedy rebuilding are strong. Therefore, it is critical that the governance and planning framework for recovery and reconstruction be established before disaster occurs.

To provide direction for any planning that happens post-disaster, the Mayor and the Board of Supervisors should establish an interdepartmental working group to create a framework for recovery and reconstruction. The working group should be comprised of representatives from the following departments: the Mayor's Office, Mayor's Office of Economic and Workforce Development, Mayor's Office of Housing and Community Development, Controller's Office, Chamber of Commerce, City Attorney's Office, City Administrator's Office, Office of Resilience and Capital Planning, Office of Community Investment and Infrastructure, Office of Racial Equity, Department of Building Inspection, Department of Emergency Management, Department of the Environment, Planning Department, Public Works, Public Utilities Commission, Human Rights Commission, the Board of San Francisco Travel, the Academy of Sciences, among others.

The framework should outline the City's priorities and guidelines for the City's post-disaster recovery and reconstruction. This framework should be tested through scenario planning before being developed fully into a post-disaster recovery and reconstruction plan. While such an effort cannot anticipate the impact of every disaster, the effort can reduce the demands of rebuilding after a disaster.

POLICY 6.2.2.
As a part of the advance recovery framework, develop and adopt a repair and reconstruction ordinance.

The rebuilding and reconstruction efforts that will need to be undertaken after a disaster will need to be swift in repairing lifelines, homes, and other resources the City depends upon. After a disaster, the Departments of Building Inspection and Planning will likely see a surge in permit applications. While the Department of Building Inspection already maintains procedures to deal with emergency repairs, the City does not have plans to deal with the sustained demand that may result from large-scale reconstruction. Upon completion of the advance recovery framework, the task force should develop a recovery and repair ordinance that help implement the framework and facilitate the repair and reconstruction of buildings following disaster.

The recovery and repair ordinance should build upon existing building and planning code standards and policies to facilitate an efficient reconstruction process, help to simplify and expedite the permitting and review process, support integration of racial and social equity and resilience principles, while avoiding a hastily administered permitting process. The ordinance should establish clear permit processing and review procedures to expedite rebuilding in the post-disaster period, while providing the amount of review necessary to ensure that reconstruction meets the City's objectives and appropriate local policies, plans, and code standards, yet is economically feasible.

The ordinance should consider policies to address nonconforming uses and buildings, explore modifications to outdated codes and standards, consider the applicability of the City's notification or other review procedures, and address historic buildings to ensure that, to the greatest extent possible, repairs maintain the integrity of the structure without adversely affecting its historic nature. The ordinance should also revise post-earthquake building inspection protocols to identify buildings that have reached functional recovery that can be occupied safely despite damage and loss of utilities, allowing residents to safely shelter in place while waiting to make repairs.

The ordinance should create priority categories for building types, prioritizing critical response facilities first. The ordinance should also be clear on the length of time during which it is applicable. It is important that the ordinance not work in conflict with other City goals. Large-scale damage to confined areas might warrant specific neighborhood-level plans or reconstruction guidelines, and these will take time to prepare. If necessary, the ordinance should allow for periods of non-building while important changes are adopted into law. The ordinance should also include sufficient provisions to ensure that it is evaluated, and amendments can be made as needed, post-disaster, to appropriately address the disaster impacts.

POLICY 6.2.3.
As a part of the advance recovery framework, coordinate the realignment of government post-disaster, so City employees' skills can be used effectively towards recovery and reconstruction efforts.

New roles and responsibilities for governments will emerge after a disaster strikes. It is imperative that government be nimble enough to adjust to the various new roles after the disaster. The City should be willing to reconfigure offices, departments, and services to be best serve the public after a disaster. The Disaster Service Workers program may extend into recovery and reconstruction phases.

For instance, there might be the need for the Planning Department, Public Works, or Department of Building Inspection to work together in teams and be decentralized with satellite offices set up in neighborhoods that were particularly devastated by a disaster. By placing them in neighborhoods, their time can be better spent on the ground understanding what type of reconstruction is necessary and possible, through inspections and site visits with building owners and residents.

POLICY 6.2.4.
Update the advance recovery framework on a regular basis so that it continues to be aligned with City goals and values.

The advance recovery framework should be updated as necessary to reflect changing conditions, changes in City policy and technology, and changes in state and federal regulations that affect post-disaster recovery management, financing, and other processes. The task force should set, in its creation of the plan, a schedule for regular updates to ensure it keeps up with shifting community priorities as well as to keep it present and important in the public's mind. The community must be involved in the process to identify and develop the community priorities, along with the specific core values of recovery. The advance recovery framework can inform more targeted resilience planning processes that are place-based or site-specific, such as in Environmental Justice Communities or other areas vulnerable to disaster.

POLICY 6.2.5.
Develop and maintain broad public support for the advance recovery framework to ensure its eventual implementation.

Once an advance recovery framework is developed, its work is not over. Implementation of the framework post-disaster is its critical mission, and achieving this in the aftermath of a disaster will require vigilance on the City's part. Community demands for rapid reconstruction will likely be perceived by many to be in conflict with calls for post-disaster planning and time needed to complete such a process.

The City should develop an ongoing program to regularly train the City's leadership and build community support for the framework to ensure its implementation in a time-compressed and high-pressure post-disaster environment. While there will always be tensions to rebuild quickly post-disaster, the desire for haste should not preempt the implementation of the recovery framework or undermine a potentially necessary recovery and rebuilding process. The community outreach process for the advance recovery framework should provide a vehicle to strengthen community support.

POLICY 6.2.6.
Post-disaster, build upon the advance recovery framework to create a recovery and reconstruction plan to direct the City's reconstruction activities, manage the long-term recovery period, and coordinate rebuilding activity.

Using the pre-disaster framework as the basis for all planning, the next step is turning that framework into tangible actions to direct and manage the specific impacts of an actual disaster.

Therefore, after a disaster occurs, the City shall establish a recovery and reconstruction task force to guide the planning process and plan development built upon the City's recovery framework. The task force should be made up not only of City agencies represented in the working group, but also a range of community representatives, including business interests, nonprofits and industry leaders, policy advocates, and neighborhood representatives. The task force should also engage with and involve representatives of other counties, state, and federal agencies. The task force's efforts should be directed by a designated lead agency or individual who can facilitate the recovery and reconstruction planning process and oversee its implementation.

The task force will be responsible for the development, drafting, and adoption of the post-disaster recovery and reconstruction plan, following the established framework and guidelines. Perversely, a disaster may present the City with a unique opportunity to physically, economically, and socially strengthen the City and the region equitably; the recovery and reconstruction plan should take advantage of this opportunity.

POLICY 6.2.7.
Rebuild after a major disaster consistent with established General Plan objectives and policies.

The General Plan has been adopted, after much public consideration, to assure the preservation, enhancement, and safety of this very desirable urban environment. In efforts to restore damaged areas of the City, existing development policies and regulations should be respected. Opportunities may be created for realizing General Plan policies, such as increasing affordable housing, improving circulation

systems, and providing public or private open space. In areas with extensive building and infrastructure damage, an area plan may be the best approach to coordinate rebuilding to take advantage of opportunities for neighborhood improvement. The rebuilding process may also enable possibilities for advancing environmental justice, increasing mobility through improved and increased public transit, as well as other alternatives to the private automobile. Future Elements and Area Plans of the General Plan should be formulated with an awareness of their potential applicability in relation to disaster recovery.

POLICY 6.2.8.
Ensure that an equitable recovery and reconstruction plan is adopted that is comprehensive and consistent with already established City goals, policies, and programs.

The recovery and reconstruction plan will need to prepare the City to meet immediate changing needs after a disaster. Special services and facilities will be needed on a short-term basis, including temporary housing, commercial facilities, and health and human services. During the recovery period, it may be necessary to temporarily locate these facilities in areas not normally available for development, or at higher densities than is normally allowed. Extensive damage may warrant reconsideration of large-scale issues such as housing locations, transit, and public infrastructure such as streets and freeways. A detailed recovery and reconstruction plan may require planning at scales that exceed existing policies and controls.

The recovery and reconstruction plan should build upon established General Plan goals, objectives, and policies, and ensure consistency with City programs, policies, and regulations. The plan should include clear policies and programs addressing the following at a minimum:

- Coordination with federal and state agencies
- Coordination with other regional cities and counties
- Protection of Environmental Justice Communities and other vulnerable people
- Plans for interim housing (considered to be a part of long-term planning, because many of the housing solutions may become permanent)
- Plans for financing and incentivizing housing repairs and construction of potentially large numbers of replacement housing units, including consideration for affordability needs
- Plans for land use decisions and recommended changes in response to local opportunities
- Establishment of public reconstruction priorities

The recovery and reconstruction plan may also consider potential changes to the City's physical framework and development pattern, potentially reviewing issues such as:

- Structurally and geologically hazardous conditions and mitigation options
- Re-examination of street patterns, street design, and standards such as required width, etc
- Designation of areas for consideration of land acquisitions, reconfigurations, consolidations, and subdivisions
- Comprehensively addressing environmental justice issues
- Recommendations for changes and improvements to major transportation routes, transit networks, and other lifelines
- Revisions to City infrastructure networks, including possible undergrounding of utilities, and use of new technologies in service provision
- Guidance for financing and advancing the City's long-term economic recovery.

While the specific uses of public lands may vary after a large-scale disaster, public lands must be preserved for public purposes. As circumstances allow, pursue opportunities for expanding public lands for public purposes.

POLICY 6.2.9.
Where necessary, use the City's public authority to expedite repair, reconstruction, and rebuilding in a just and equitable manner.

In the aftermath of a disaster, there may be properties that lie fallow for some time. The damage may be so severe that owners without insurance simply abandon properties; absentee owners and landlords could choose simply to not return; and there may be cases where it is not economically feasible or possible for owners to rebuild.

The City maintains the authority to impose policies, rules, and regulations to protect the public welfare, order, and security. If public welfare is at stake—for example, in damaged rental properties that remain unrepaired and unoccupied, are a safety or health hazard, or have deteriorated to such a degree that they are unlikely to be restored to quality housing—the City may need to explore ways of restoring these units through partnerships with community-based organizations, neighborhood-based efforts, and other key stakeholders.

The City should carefully consider the lessons from history prior to exercising eminent domain. There have been historic misuses of the power of eminent domain that have significantly harmed communities. In the 1940s, eminent domain harmed the Japanese American community during internment with forcible loss of property and belongings. In the 1950s, the City exercised eminent domain once again and harmed the African American community during redevelopment of the Western Addition and the Fillmore. These pernicious events should be used as cautionary tales for future uses of this tool. The power of eminent domain can be used to expand public benefits, such as the Hualapai Nation of Arizona exercising its authority to reclaim land for tribal ownership and use. The City also used eminent domain to expand public benefits through the Central Subway, extending Muni light rail service.

In addition to health and safety, the City should prioritize housing equity in the community. The City can consider the return and retention of the American Indian community, Black community, and other communities of color post-disaster; the housing needs for individuals and families with experience of homelessness; the community needs for low-income and other vulnerable people; and the recovery and growth of the local business community.

OBJECTIVE 6.3.

EQUITABLE INVESTMENT. PURSUE PLANS AND STRATEGIES THAT WOULD EQUITABLY REBUILD SAN FRANCISCO FOR EVERYONE, STARTING WITH ENVIRONMENTAL JUSTICE COMMUNITIES.

POLICY 6.3.1.
Develop an economic recovery strategy to guide planning and implementation before the disaster strikes.

A disaster can have a major impact on the economic landscape of the City. Previous earthquakes have resulted in dramatic losses in office space and subsequent relocation of businesses; in drops in tourism, which is one of the City's major industries; and disproportionate impacts on small businesses, who have fewer resources with which to recover. The City should ensure an economic recovery strategy is in place to equitably foster business resumption and growth post-disaster.

In the wake of a disaster, many local businesses, particularly small businesses, will struggle to resume activity. They may have lost assets, necessary facilities or equipment, access to employees, and even their customer base. While the City's own funds will be limited from providing direct financial assistance, there are many other things it can do to support businesses. For example, in response to the COVID-19 pandemic, the social distancing and masking requirements, as well as discouragement of sharing indoor space, made it challenging for businesses such as restaurants and small retail shops from operating normally. The City's Shared Spaces Program supported small businesses by allowing them to expand their operations to outdoor places like sidewalks, streets, and open lots.

The City can encourage loan and grant funding from non-government sources, and further affected businesses' ability to secure loans from local banks or unions by offering government guarantees on loans. Tax incentives should be explored to encourage reinvestment and growth of business, including temporary payroll tax exclusion, sales tax exemption and tax write-offs on replaced business equipment and furniture, and property tax abatements.

The economic recovery strategy should prioritize the elements of the City necessary to support business activity, starting in Environmental Justice Communities, such as the restoration of transit and regional roadways; utilities and services available to the business community; and housing availability for the local workforce and customers. The City should work with the business community to develop this strategy, and solicit wide advice on how to facilitate business revitalization. The strategy should use the latest assessment tools provided by the Office of Racial Equity and center the needs of businesses that are owned by and/or serve residents in Environmental Justice Communities. The strategy may include recommendations to hasten the resumption of business such as loans, funding for workplace building repair, and financial assistance. Updates to the City's Economic Strategy, created by the Office of Economic and Workforce Development, should include plans for economic recovery in case of a disaster.

POLICY 6.3.2.
Support the efforts of the Controller's Office to ensure service continuation and financing of post-disaster recovery and reconstruction efforts.

The Controller's Office is the designated lead agency for the Finance and Administration Section of the Emergency Response Plan, supported by the Department of Administrative Services and the Office of the Treasurer. These groups are tasked with ensuring employee payment and compensation, and with payment of contractor and vendor accounts, in the immediate response phase of a disaster through recovery to pre-disaster service. These elements will be critical to the continuing operation of City services.

In order to ensure continuation, the Controller's Office has programs underway to ensure that payroll continues to be processed for all City workers, implementing off-site payroll processing if needed; that employee compensation is resumed; that financial and accounting computer systems can recover and resume as soon as possible; and that all payments, both to City workers and to outside vendors, are processed within a reasonable time.

The City should actively encourage the use of direct deposit by all City employees, and inform all employees of the potential loss of pay in the event of a disaster for those who do not use direct deposit. Additionally, the Controller's Office should work with City employees not currently using direct deposit in order to provide backup account information that can be switched to direct deposit in the event of a disaster. The City should assist those employees without access to a bank account to open an account with a bank or credit union.

The Controller's Office will also direct the established financial policies to guide the City in its response and recovery to an emergency, particularly as it relates to personnel time, contracts, and equipment and supplies relating to the emergency. As a part of this responsibility, the Office should work with other City agencies to determine need for contracts with vendors who do not already occur on existing approved vendor lists, and it should set up these new vendor contracts well before the emergency occurs.

POLICY 6.3.3.
Provide the basic needs of all people while lifeline support is interrupted.

Beyond the immediate aftermath of a disaster, and beyond the assurance of infrastructure with explicit life safety purpose, there may still be persistent and critical basic needs for the people of San Francisco as the City recovers from disaster. The City should make a plan and provide support to cover the basic needs for all people while systems are reestablished and communities return to self-sufficiency. The plan should include basic shelter, health, and food needs, and focused on those with the least adaptive capacity for self-care. This includes Environmental Justice Communities, people with disabilities and other functional needs, the young and the elderly, and other vulnerable people.

POLICY 6.3.4.
Explore expanding the scope of the City's disaster relief programs.

The City provides financial relief to property owners through tax programs including disaster relief on property taxes, and participation in the state's Section 69.3 property tax disaster relief program which enables former residents who move to other counties to maintain their previous level of property taxation prior to the disaster.

The City should review other forms of tax relief to affected residents and business owners, including reductions on other fees and taxes. There are many local taxes and fees that are under the jurisdiction of the City, and the City has the authority to waive or defer such taxes and fees in an emergency.

Educating residents about the lack of access to funds in the event of a disaster is critical. The Office of the Treasurer and Tax Collector should be involved in working with financial institutions and educating the public on how to access private funds during a time when typical procedures will not be possible. For example, the City can leverage banking contracts to assist residents directly with cash payments.

POLICY 6.3.5.
Ensure effective use of public emergency funds and expenditures, and recovery of those expenditures.

The Controller's Office is responsible for tracking expenditures for the cost of responding to, and recovering from, the disaster. This includes tracking, recording, and reporting on all payments made in response to the emergency, including personnel working during the emergency, outside contractor work, and expenses such as supplies, materials, equipment, and vehicles.

It is important that the tasks that are authorized are relevant and necessary, and that their completion is well-documented by the Controller's Office and its supporting agencies. This documentation will be critical in submitting disaster reimbursement claims to the state and federal government and ensuring support funding is received.

Glossary

This Glossary is intended to define key words and phrases used throughout the Safety & Resilience Element of the San Francisco General Plan, to guide interpretation of the goals, objectives, and policies.

adaptation, adaptive capacity

- Adaptation is the ability, competency, and capacity of a system to adjust to variables. Climate Adaptation is the proactive measures taken to adjust the built environment and human systems to reduce harm from the impacts of the climate crisis.

- Adaptive capacity refers to the ability to adjust functions to reduce harm. In social systems, it refers to the ability of institutions and people to problem solve and take opportunities for recovery and reconstruction. It includes the ability of San Francisco's individuals, communities, institutions, businesses, and systems to survive, adapt, and grow, no matter what kind of chronic stresses and acute shocks they may experience. For San Francisco this means (1) the ability to quickly respond and recovery from a disaster or large shock; (2) the ability to address systemic crises such as lack of economic mobility, inequity, poverty, and housing shortages; and (3) the ability to prepare for and address slow-moving disasters like climate change and sea level rise.

disaster

- A disaster is a hazard that has occurred, or a hazard event. A disaster is often—but not always—sudden and causes loss of life or great damage. The terms “disaster” and “hazard” are often used interchangeably. See *Hazard.*

environmental justice, Environmental Justice Communities

- Environmental justice is the equitable distribution of environmental benefits and elimination of environmental burdens to promote healthy communities where everyone in San Francisco can thrive. Government should foster environmental justice through processes that address, mitigate, and amend past injustices while enabling proactive, community-led solutions for the future.

- Environmental Justice Communities face environmental racism and subsequently bear disproportionate environmental burdens. Environmental Justice Communities are disproportionately low-income communities and communities of color. Leadership by Environmental Justice Communities must be involved in the creation and decision-making of environmental justice solutions. In San Francisco, Environmental Justice Communities are identified through the Environmental Justice Communities Map incorporated here by reference, and are defined as the census tracts with the top 30% of cumulative environmental and socioeconomic vulnerability across the City. The Environmental Justice Communities Map was developed in response to California Senate Bill 1000 (SB 1000) which requires cities and counties to adopt a map of “disadvantaged communities” and adopt environmental justice policies in their General Plan to address “unique or compounded health risks.” The Environmental Justice Map and Framework is expected to be adopted into the General Plan in 2023.

functional recovery

- Functional recovery is a standard for buildings and lifeline infrastructure to be designed and constructed to support the basic intended functions of a building soon after an earthquake or other severe hazard, such as eating, sleeping, shopping, or learning. This standard includes maintenance and the restoration of occupancy within a determined maximum acceptable time, and goes beyond life safety standards.

green building, green infrastructure

- The principles of green building lead building design, construction, and operation to reduce or eliminate negative impacts, and can create positive impacts, on climate and the natural environment. The local context, such as climate conditions, building types and age, and cultural traditions, contribute to green building approaches. In San Francisco, these principles are supported by the Green Building Code.

- green infrastructure is an approach to water management that protects, restores, or mimics the natural water cycle. It can be effective, economical, and enhance community safety and quality of life. Green Infrastructure incorporates both the natural environment and engineered systems to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife.

hazard

- A hazard is a source of potential danger or an adverse condition that could harm people, socioeconomic systems, or built and natural environments. Hazards can occur naturally and/or by human influence. As interactions between society and the natural environment are complex, it can be difficult to delineate a singular source of hazards (e.g., human-influenced ignition of fires during drought conditions, development in low-lying areas prone to flooding).
- Geological Hazards include: Earthquake, Tsunami, Landslide, Dam or Reservoir Failure
    - An earthquake is a sudden slip on a fault in the earth’s crust, and the resulting ground shaking and radiated seismic energy caused by the slip.
    - A tsunami is a series of ocean waves caused by sudden movement of the sea floor, typically as a result of major earthquakes.
    - Landslide is a general term used to describe the downslope movement of soil, rock, and organic materials under the effects of gravity.
    - A dam or reservoir failure is an unplanned release of water resulting from the structural compromise or collapse of a dam or other structural element, such as the wall of a tank.
- Weather-Related Hazards include: Flooding, High Wind, Extreme Heat, Drought
    - Flooding is covering or inundation of normally dry land with large amounts of water, can be caused by the overflow of water from a stream, river, lake, coastal body, or a water control feature such as a pipe, dam, or levee.
    - The National Weather Service defines “high winds” as sustained wind speeds of 40 miles per hour (mph) or greater lasting for one hour or longer, or winds of 58 mph or greater for any duration.
    - According to the National Weather Service, extreme heat occurs when the temperature reaches extremely high levels or when the combination of heat and humidity causes the air to become oppressive and stifling. Generally, extreme heat is 10 degrees above the normal temperature over an extended period.
    - Drought is insufficient water over a prolonged period.
- Combustion-Related Hazards include: Large Urban Fire, Wildfire, Poor Air Quality
    - A Large Urban Fire is a large, destructive fire that spreads across one or more City streets.
    - A Wildfire is an unplanned, uncontrolled fire in an area of combustive vegetation or fuel.
    - Poor Air Quality is the condition of ambient air quality having high concentrations of air pollutants that are unhealthy to public health and the environment. The U.S. Environmental Protection Agency measures air quality with the Air Quality Index (AQI), which measures the concentration of five pollutants regulated by the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. When AQI exceeds 100, air quality becomes unhealthy for certain sensitive groups of people, then everyone as air quality worsens.
- Biological and Toxic Hazards include: Pandemic, Hazardous Materials
    - A Pandemic is when an infectious disease outbreak occurs worldwide, or over a very wide area and affects many people.
    - Hazardous Materials are harmful both to human health and to the environment. An accidental hazardous material release can occur wherever hazardous materials are manufactured, stored, transported, or used.

infrastructure

- The assets and systems that deliver public services to a community, such as roads delivering goods and transportation options, telephone lines and fiber optic cables delivering internet, pipes and pumps delivering water, and the power grid delivering energy.

lifelines

- Lifelines are the systems, assets, and facilities that provide services vital to the function of society and important to emergency response and recovery after disaster. These lifelines include water, sewer, and power provision; communication networks such as phone, radio, television, and internet; transportation; food; shelter; health; and more. By definition, these lifelines can extend beyond City boundaries. For example, state and private agencies operate some regional lifelines, like highways or internet.

mitigation, hazard mitigation

- Mitigation is the reduction of vulnerabilities, risks, and impacts of hazards on people, assets, and the environment. Often strategic nearer-term investments, mitigation actions can lessen the scale and intensity of potential future damage, thereby reducing response and recovery expenditures. Proactive hazard mitigation is particularly important for protecting the most vulnerable populations.

- Hazard mitigation is a series of sustained actions taken to reduce or eliminate short- and long-term risks to life and property from hazards.

racial advantage (or privilege)

- Racial advantage, or privilege, is the unquestioned and unearned set of advantages, entitlements, benefits and choices bestowed on people solely because of their race.

racial and social equity

- Racial equity is the systematic fair treatment of people of all races that results in equal outcomes, while recognizing the historical context and systemic harm done to specific racial groups.

- Social equity is the systemic fair treatment of people of all social groups that results in equal outcomes, while recognizing the historical context and systematic harm done to specific groups, such as along gender identity, sex, religion, and disability status.

racial disparity

- Racial disparity is a condition where one racial group systemically and disproportionately experiences worse outcomes in comparison to another racial group.

recovery and reconstruction

- Recovery and reconstruction involve activities that restore and rebuild communities post-disaster—with fundamentals such as housing security, business resumption, lifeline restoration, and provision of essential services. The thoughtful rebuilding of day-to-day livelihoods can advance San Francisco towards a more equitable, sustainable, and resilient future.

resilience

- Resilience in San Francisco describes the capacity of individuals, communities, institutions, businesses, and systems within the City to survive, adapt, and grow, no matter what kind of chronic stresses and acute shocks they may experience. It is important to note that resilience is a concept that extends beyond preparation for discrete natural disasters and should be defined in connection to issues such as climate change, escalating urbanization, and other disruptions of daily life.

response

- Response efforts provide critical information and emergency services during and immediately after disasters. It focuses on saving lives and preventing further injury to people and places, particularly focused on vulnerable populations. Response activities bring immediate support and relief against the social, economic, and environmental consequences of disasters.

risk, risk reduction

- Risk is the chance that a given hazard could occur multiplied by the understood consequences of an impact on people, socioeconomic systems, or the built and natural environment.

- Risk reduction includes regulatory controls, plans, policies, programs, projects, initiatives, and anything else employed to eliminate, avoid, or minimize risks.

safety, life safety

- Safety is the state of being protected from harm or danger. This includes physical and mental harm from external and internal dangers.

- Life safety refers to building performance that prevents partial or total structural collapse and limits damage to nonstructural and non-life-threatening levels.

vulnerable communities

- For the purposes of the Safety & Resilience Element, vulnerable communities describe communities who experience heightened risk and increased sensitivity to potential harms than the City average. To be vulnerable means possessing a lower adaptive capacity to withstand stresses, and often means that these people and places are hit the “first and worst” by disasters. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by adverse climate impacts. The specific population groups encompassed by this term vary from issue to issue, and vulnerability can be defined by a variety of factors, such as geography, demographics, health disparities, and asset ownership. For example, vulnerable communities can include seniors, people with disabilities and other function needs, institutionalized or incarcerated people, youth who have been separated from their families, residents of single-room occupancy hotels and public housing, and others. The designation does not describe any intrinsic characteristic of a group of people, but rather a failure of society and systemic actions which have rendered them vulnerable.

2022 Safety and Resilience Element adopted by the San Francisco Board of Supervisors Ordinance 0260-22 on 12/13/2022.

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; "timwolfred@aol.com"; "dhcasf@gmail.com"; "lentzplanning@gmail.com"; "cb720d@att.com"; "cammy.blackstone@att.com"
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	APPELLANT CORRESPONDENCE: Hearings - Appeal of CEQA Exemption Determination and Conditional Use Authorization - Proposed 350 Amber Drive Project - December 9, 2025
Date:	Wednesday, November 26, 2025 2:35:25 PM

Greetings,

The Office of the Clerk of the Board is in receipt of correspondence from the Appellant, Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association, for the Special Order before the Board of Supervisors on **December 9, 2025**, at 3:00 p.m. for the appeals of CEQA Exemption Determination and Conditional Use Authorization for the proposed project at 350 Amber Drive.

Please find the following link to the document for the matter:

Appellant Correspondence - November 26, 2025
Public Correspondence - 251094 CEQA Appeal
Public Correspondence - 251098 CUA Appeal

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251094
Board of Supervisors File No. 251098

Regards,

Arthur Khoo
Office of the Clerk of the Board
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
(415) 554-4447 | (415) 554-5163
arthur.khoo@sfgov.org | www.sfbos.org

Disclosures: *Personal information that is provided in communications to the Board of Supervisors is subject to disclosure under the California Public Records Act and the San Francisco Sunshine Ordinance. Personal information*

provided will not be redacted. Members of the public are not required to provide personal identifying information when they communicate with the Board of Supervisors and its committees. All written or oral communications that members of the public submit to the Clerk's Office regarding pending legislation or hearings will be made available to all members of the public for inspection and copying. The Clerk's Office does not redact any information from these submissions. This means that personal information—including names, phone numbers, addresses and similar information that a member of the public elects to submit to the Board and its committees—may appear on the Board of Supervisors website or in other public documents that members of the public may inspect or copy.

P: (626) 314-3821
E: info@mitchtsailaw.com

Mitchell M. Tsai
Law Firm

139 S. Hudson Ave., Suite 200
Pasadena, California 91101

VIA E-MAIL

November 26, 2025

City and County of San Francisco, Board of Supervisors
1 Dr. Carlton B. Goodlett Place
City Hall, Room 244
San Francisco, CA 94102-4689
Em: Board.of.Supervisors@sfgov.org

RE: Appeal of Planning Commission's CEQA Exemption Determination, Conditional Use Authorization, and Shadow Findings for 350 Amber Drive Project on September 25, 2025 – (Record No. 2024-004318ENV) (2024-004318CUASHD)

Dear Board of Supervisors,

On behalf of Diamond Heights Community Association ("**Appellant**"), our Office is submitting this correspondence for the December 9, 2025 public hearing regarding appeals of the City and County of San Francisco ("**City**" or "**County**") Planning Commission's ("**Commission**") actions on September 25, 2025 for the development project proposed to be located at 350 Amber Drive in the City (Record No. 2024-004318ENV) ("**Project**"), including **i)** a California Environmental Quality Act ("**CEQA**") Class 3 Categorical Exemption determination; and **ii)** Approval of Conditional Use Authorization ("**CUA**") and Shadow Findings.

Appellant asserts that the Project is facially ineligible for the CEQA Class 3 Categorical Exemption and subject to further environmental review based on several exceptions, as well that the Project's CUA and Shadow Findings are predicated on informational flaws and inconsistent with the City's land use policies, thereby requiring reversal of the Planning Commission actions on September 25, 2025. Appellant therefore respectfully submits that the Board of Supervisors ("**Board**") approve both appeals and reverse the Commission's a) CEQA exemption determination and b) approval of the CUA and Shadow Findings, for the Project. The Board should a) approve the CEQA and CUA appeals and deny the project outright or, alternatively, require: b) the Project to undergo additional environmental review pursuant to CEQA, including the preparation of an Environmental Impact Report

(EIR), and b) Project modifications or conditions of approval to the CUA or Shadow Findings that address Appellant's environmental and public safety concerns.

The Diamond Heights Community Association is an organization of City residents and property owners near the Project site with a strong interest in well ordered land use planning and in addressing the environmental impacts of the Project, including potential impacts on the adjacent Glen Canyon Park and its natural and biological resources. Individual members of the Diamond Heights Community Association live, work, and recreate in the Project vicinity and may therefore be directly affected by the Project.

The City describes the proposed Project as "the installation of a new AT&T Wireless Macro Wireless Telecommunications Services (WTS) Facility on an approximately 104-foot-tall monopole located at the rear of the San Francisco Police Academy. The WTS facility will consist of twelve (12) new antennas, nine (9) new remote radio units, three (3) tower mounted DC-9 surge suppressors, one (1) GPS unit mounted on proposed outdoor equipment cabinet, one (1) walk-up cabinet, and one (1) 30kw DC generator with a 190-gallon diesel fuel tank on a concrete pad. The ancillary equipment will be surrounded by an 8' chain link fence." (*See* September 25, 2025 San Francisco Planning Commission, Executive Summary, pp. 1-2).

Pursuant to City Administrative Code, Section 31.16 and Planning Code, Section 308.1, our office asserts and raises the following grounds in support of its CEQA and CUA appeals, respectively. On appeal, the Board of Supervisors is not limited to the Commission's earlier analysis or findings and "shall conduct its own independent review of whether the CEQA decision adequately complies with the requirements of CEQA. The Board shall consider anew all facts, evidence and issues related to the adequacy, accuracy and objectiveness of the CEQA decision, including, but not limited to, the sufficiency of the CEQA decision and the correctness of its conclusions." Admin. Code, Section 31.16(b)(6).

The Appellant expressly reserves the right to supplement this letter with additional evidence and materials at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, Section 65009(b); Pub. Res. Code, Section 21177(a).

The Appellant further incorporates by reference all the comments and concerns raised to date on the Project or its environmental CEQA clearance. *See Citizens for Clean Energy v. City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who

has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Lastly, the Appellant requests that the County provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act, (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body. We further request that such notices be provided to us *also* in their *electronic form,* as soon as those become available.

I. THE PROPOSED PROJECT IS FACIALLY INELIGIBLE FOR THE CEQA CLASS 3 CATEGORICAL EXEMPTION BASED ON THE CLEAR STATUTORY TEXT AND DEFINITIONAL REQUIREMENTS.

On September 25, 2025, the Planning Commission determined that the Project was exempted from further environmental review pursuant to the Class 3 categorical exemption under CEQA Guidelines Section 15303. However, Appellant asserts that the Project is facially ineligible for the stated exemption and instead required to undergo further environmental review. On its face, the proposed Project is simply ineligible for the CEQA Class 3 categorical exemption. The plain statutory text clearly indicates that the Project is incompatible with the sought exemption. The statute provides, in relevant part, that:

> Class 3 consists of construction and location of limited numbers of ***new, small*** facilities or structures; installation of ***small new*** equipment and facilities in small structures; and the conversion of existing ***small*** structures from one use to another where only ***minor*** modifications are made in the exterior of the structure." 14 CCR Section 15303 (emphases added).

Thus, as the statute's language clearly provides, the Class 3 categorical exemption is typically reserved for "new, ***small*** facilities or structures," or similar projects. *Id.* (emphasis added). The proposed Project, which entails a massive tower over 100 feet tall where no other similar structures presently exist, is simply inapposite and incompatible with the sought exemption because it is far from being a small structure or facility. On the contrary, the Project entails substantial and significant development that is far beyond the scope of the stated exemption. Put simply, the Project cannot qualify for the Class 3 categorical exemption based on the statute's plain text and clear

parameters. The Project falls outside the scope of the CEQA class 3 categorical exemption.

The Planning Commission's finding that the Project is exempt from CEQA under the Class 3 exemption is also flawed, as a matter of law. The finding is based on a *version* of the Class 3 exemption, which disregards the express language of the Class 3 exemption provided under the CEQA Guidelines. Simply put, the Planning Commission – and the County's Planning Department – iterated their *own* Class 3 exemption under CEQA to *match* the Project with, rather than assess whether the Project indeed *fits* the scope of the unaltered Class 3 exemption as it is found in the CEQA Guidelines. As detailed further below, the Project's scope does not fit the Class 3 exemption since what is proposed is a *new* structure (and not a conversion of use), it is not a *small* structure, and it involves hazardous materials, such as the 190 gallon generator fuel tank to be installed and operated.

Further, the City has provided inconsistent descriptions regarding whether the Project entails mere additions or new construction. For example, the City's filled out "CEQA Exemption Determination" for the Project marks the box of "addition/alteration" on the first page, but then goes on to admit in the "Project Description" that the Project is *installation* of new equipment and facility on the Project Site. *See* **Exhibit 1,** p. 1 (City's CEQA Exemption Determination). Moreover, on that same first page, the County marks Class 3 and admits that the Project is a "new construction," as shown in the screenshots below from the said Exemption Determination (highlighted emphasis added):

PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address		Block/Lot(s)
350 AMBER DR		7521005
Case No.		**Permit No.**
2024-004318ENV		
■ **Addition/ Alteration**	☐ **Demolition (requires HRE for Category B Building)**	☐ **New Construction**

Project description for Planning Department approval.

A (N) AT&T UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF INSTALLING:
· INSTALLATION OF A 20'-0" X 27'-6" AT&T TELECOMMUNICATIONS FACILITY (~550 SQ. FT.)
· INSTALLATION OF A AT&T 103'-0" MONOPOLE
· INSTALLATION OF A AT&T 8' CHAIN LINK FENCE
· INSTALLATION OF (2) AT&T 6' WIDE AND (1) 4' WIDE CHAIN LINK GATES
· INSTALLATION OF AT&T ANTENNA MOUNTING ASSEMBLIES AT A 100'-0" CENTERLINE
· INSTALLATION OF (12) AT&T PANEL ANTENNAS MOUNTED AT A 100'-0" CENTERLINE ((4) PER SECTOR)
· INSTALLATION OF (9) AT&T REMOTE RADIO UNITS (RRUS) ((3) PER SECTOR)
· INSTALLATION OF (3) AT&T TOWER MOUNTED DC-9 SURGE SUPPRESSORS
· INSTALLATION OF (1) FIRSTNET BY AT&T GPS UNIT MOUNTED ON PROPOSED OUTDOOR EQUIPMENT CABINET
· INSTALLATION OF (1) WALK-UP CABINET (WUC) EQUIPMENT CABINET
· INSTALLATION OF A NEW AT&T 30KW DC GENERATOR WITH 190 GALLON DIESEL FUEL TANK ON A NEW 5'-0" X 9'-0" CONCRETE PAD

EXEMPTION TYPE

The project has been determined to be exempt under the California Environmental Quality Act (CEQA).	
☐	**Class 1 - Existing Facilities.** **(CEQA Guidelines section 15301)** Interior and exterior alterations; additions under 10,000 sq. ft.
■	**Class 3 - New Construction.** **(CEQA Guidelines section 15303)** Up to three new single-family residences or six dwelling units in one building; commercial/office structures; utility extensions; change of use under 10,000 sq. ft. if principally permitted or with a CU.

(**Exhibit 1,** p. 1.)

As such, the Exemption Determination is flawed on its face and cannot be relied upon by the Planning Commission or City in approving the Project. Most importantly, however, it appears that the County relies on an inaccurate rendition of the Class 3 CEQA exemption as noted on the screenshot above, by claiming that such a Class 3 CEQA exemption is applicable to: "Up to **three new single-family residences** or **six dwelling units** in one building; **commercial/office structures**; utility **extensions**, **change** of **use** under **10,0000 sq. ft**. if principally permittd [sic.] or with a CU." (**Exhibit 1,** p. 1.) Not so.

The County manifestly *made up* their own version of Class 3 exemption, where it combined various parts of Class 3 exemption and failed to specify which category applies to the Project.

In addition to being facially ineligible for the stated exemption, the Project does not fit within or fall under any of the enumerated "examples" provided by the statute, which are stated as:

> § 15303. New Construction or Conversion of **Small** Structures.
>
> Class 3 consists of **construction** and **location** of **limited numbers** of new, **small facilities** or structures; **installation** of **small new equipment** and **facilities** in **small structures**; and the **conversion** of **existing small structures** from one use to another where **only minor modifications** are made in the **exterior** of the structure. The **numbers** of structures described in this section are the **maximum allowable** on any legal parcel. Examples of this exemption include but are not limited to:
>
> (a) One single-family residence, or a second dwelling unit in a residential zone. In **urbanized areas**, up to **three single-family residences** may be constructed or converted under this exemption.
>
> (b) A duplex or similar multi-family residential structure totaling no more than four dwelling units. In urbanized areas, this exemption applies to **apartments**, **duplexes**, and **similar structures** designed for **not more than six dwelling units**.
>
> (c) A store, motel, office, restaurant or similar structure **not involving** the use of significant amounts of **hazardous substances**, and not exceeding 2500 square feet in floor area. In **urbanized areas**, the **exemption** also applies to up to **four such commercial buildings not exceeding 10,000 square feet** in floor area on sites zoned for such use **if not** involving the use of **significant amounts** of **hazardous substances** where all necessary public services and facilities are available **and** the **surrounding area** is **not environmentally sensitive**.
>
> (d) Water main, sewage, electrical, gas, and other **utility extensions**, including street improvements, of **reasonable length** to **serve such construction**.
>
> (e) Accessory (appurtenant) structures including garages, carports, patios, swimming pools, and fences.
>
> (f) An accessory steam sterilization unit for the treatment of medical waste at a facility occupied by a medical waste generator, provided that the unit is installed and operated in accordance with the Medical Waste Management Act (Section 117600, et seq., of the Health and Safety Code) and accepts no offsite waste.

(Emphases added.)

Based on the express language quoted above, the Project far exceeds the scope of the exemption and its enumerated examples for the following reasons:

1) The Project is *not* a small structure or facility: it consists of a 104-feet-tall wireless tower, along with twelve (12) new antennas, nine (9) new remote radio units, three (3) tower mounted DC-9 surge suppressors, one (1) GPS unit mounted on proposed outdoor equipment cabinet, one (1) walk-up cabinet, and one (1) 30kw DC generator with a 190-gallon diesel fuel tank on a concrete pad, where the ancillary equipment will be surrounded by an 8' chain link fence; and a 500 square feet structure at the base;

2) The Project is not *part* of the Police Academy on the Project Site and is not installed to *serve* the Policy Academy or any *existing structure* on the site so as to fit under CEQA Guidelines section 15303(d). To the contrary, the Project is a free-standing independent construction in the back of the Police Academy with its own independent purposes unrelated to the Police Academy;

3) The Project is neither a single family home nor a commercial building to fit under CEQA Guidelines section 15303(a) (three single family homes or six such homes in urbanized areas); subdivision (b) (not more than six dwelling units); or subdivision (c) ("four such commercial buildings not exceeding 10,000 square feet in floor area on sites zoned for such use if not involving the use of significant amounts of hazardous substances where all necessary public services and facilities are available and the surrounding area is not environmentally sensitive");

4) Moreover, the Project is proposed in an *environmentally sensitive and significant area*, including in a known landslide zone and on a site with a recorded history of seismic activity;

5) Similarly, the Project *involves* the installation of a 190 gallon fuel tank generator, thereby creating a significant risk of exposure to hazardous substances as it has the potential to leak benzene and produce noxious and chemically hazardous odors in the environmentally sensitive area; and

6) The Project would threaten natural resources, including native plant species and wildlife, in one of the City's environmentally significant and protected areas.

As such, the Project does not fit any description under Class 3 exemption, as accurately detailed by the CEQA Guidelines section 15303 and the City's application of the Class 3 exemption is therefore manifestly flawed, as a matter of law.

Further yet, the Planning Commission's Class 3 CEQA exemption finding is flawed as it fails to consider the applicable *exceptions* to the exemption that would trigger additional environmental review for the Project, as further explained in the following section. The Planning Commission failed to consider the applicability of those exceptions based on: the critical natural resource of Glen Canyon Park, the Project's proximity to Glen Canyon Park and surrounding recreational areas, the Project's location in a known landslide zone, the Project site's history of seismic activity and failures, the historical significance of nearby structures, and unusual circumstances surrounding the Project based on its impacts on fire, seismic, and chemical hazards.

II. THE PROJECT IS SUBJECT TO FURTHER ENVIRONMENTAL REVIEW UNDER CEQA GUIDELINES SECTION 15300.2 BASED ON ITS LOCATION, CUMULATIVE IMPACTS, SIGNIFICANT EFFECTS, AND POTENTIAL IMPACTS ON HISTORICAL RESOURCES.

Even if the Project were eligible for the Class 3 Categorical Exemption, it would nonetheless be subject to further environmental review under CEQA Guidelines Section 15300.2 based on its location, cumulative impacts, significant effects, and impacts on historical resources. 14 CCR Section 15300.2. CEQA Guidelines Section 15300.2 provides several "exceptions" that trigger additional environmental review, even if a project is otherwise eligible for an exemption, including the Class 3 categorical exemption this Project seeks. The Project here implicates several of those exceptions, clearly indicating the need for additional environmental review under CEQA. Section 15300.3 provides the following exceptions that trigger additional environmental review, specifically:

"(a) **Location**. **Classes 3**, 4, 5, 6, and 11 are **qualified** by consideration of where the project is to be located--a project that is ordinarily insignificant in its impact on the environment may in a **particularly sensitive environment** be significant. Therefore, these classes are considered to apply in all instances, **except where** the project may impact on an **environmental resource** of **hazardous** or **critical**

concern where **designated**, **precisely mapped**, and **officially adopted** pursuant to law by federal, state, **or local agencies**.

(b) **Cumulative Impact**. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

(c) **Significant Effect**. A categorical exemption shall not be used for an activity where there is a **reasonable possibility** that the activity will have a **significant effect** on the **environment** due to **unusual circumstances**.

(d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

(e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

(f) **Historical Resources**. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the **significance** of a **historical resource**.

(Emphases added.)

In a nutshell, and among many other things, the Appellant and the community the Appellant represents are particularly concerned about the *safety* of the proposed Project, in light of its *location*. First and foremost, the Project is proposed in the earthquake-induced *landslide zone* mapped by *both* the California Department of Conservation's California Earthquake Hazard Zone Map (Alquist-Priolo Map), as well as the local San Francisco Seismic Hazard Map, as detailed and shown further below. The Project site has a history of seismic failures. This translates into significant landslide and soil failure concerns about the 104-feet tall and 500 feet-base Project sliding down or causing a landslide near the residential areas, Glen Canyon Park and recreational areas, such as youth playgrounds.

Second, the Project is proposed atop of a infill site, as evidenced by the County's own records, which may indicate potential existing contamination. A disturbance or seismic failure at the Project site could have significant and even catastrophic effects on nearby

residences, recreational areas, existing structures, and natural resources, including any subsurface groundwaters which may need to be reached and disturbed in order to secure the 104-feet tower and large base in place.

Similarly, per the Project's *plans* presented to the Planning Commission on September 25, 2025*,* the Project is a 104-feet tall *monopine* – i.e., a 104-feet tower camouflaged as a pine tree with artificial branches and leaves. While all other documents presented to the County suggest that the wireless facility will *not* be a *monopine* and is solely a monopole, AT&T's presented plans speak differently.[1] There is ample evidence that such artificial trees pollute the environment with their plastic branches and leaves which fall off to the ground, stay on the ground, and decay, thus causing soil and groundwater contamination harmful to the public and the surrounding biological resources. Further, at least one of the maps for the Project that were reviewed by the Planning Commission in reaching its determinations, incorrectly depicts the wireless tower on the wrong hill than where it is actually proposed.

Third, there is ample direct expert evidence that wireless facilities similar to what the Project proposes are a significant fire hazard and have caused fires in multiple areas in California. However, far from *mitigating* the fire hazard caused by the Project itself, the County approved the *siting* of such a significant fire hazard just next to a *grove* of *90-feet tall eucalyptus trees*, known for their fire-prone features. Simply put, in the highly foreseeable and likely event of a spark, electrical failure, or fire on the Project's proposed 104-feet wireless tower, or its 500 sf base, or its 30kw DC generator with a 190-gallon diesel fuel tank, the 90-feet eucalyptus trees and aging exotic oak trees in the grove will quickly catch fire with the potential to reach nearby residences, the Glen Canyon Park, recreational areas, and the nearby structures of historical significance, which would be chaotic to evacuate and nearly impossible to contain. Residents in the community are already very vigilant about fires risks from use of firecrackers in the Canyon, including use of fire alert programs through their Resilient Diamond Heights Community organization.

[1] Based on several inconsistent representations made by AT&T and its representatives, the City should closely scrutinize those representations and and should secure a clear and unambiguous Project description, including as to the nature, type, and precise location of the proposed wireless facility. Without such an accurate Project description, the County's assessment of the Project's environmental impacts and overall benefits, as well as the County's findings of consistency of the Project with various local rules and regulations are legally and factually unsupported and will not pass judicial muster.

Fourth, the Project is proposed near – and will necessarily impact – the Glen Canyon Park on the southwest, which is one of San Francisco's 31 **significant natural resource** areas ("**SNR"**), a sensitive critical resource mapped and recognized by the County of San Francisco. *See* Exhibit 2 (Naturalist David Schmid's correspondence in support of appeal).Glen Canyon Park is known for its rare wildlife species, as well as the wildlife corridor, which the County plans to link to other wildlife corridors in the County.

Similarly, the Project is proposed near the St. Nicholas Antiochian Orthodox Church and childcare center on the northwest, which was built in 1965 and is considered a historical resource. The Project is also bordered by another public park, George Christopher Playground, to the south and east, which is used by childcare centers, for youth sports, and by families and residents walking along the perimeter or near the special children's play area.

As such, the Project poses a direct threat to the environment, including public health and safety, San Francisco's critical and valuable natural resources, and historical resources, in light of the Project's siting on an infill site, with a history of seismic failures, as well as the Project's fire hazards, which may have significant irreversible consequences given the nearby aging grove of oak and eucalyptus trees and surrounding open space.

Additionally, the *location* exception applies here because the Project is proposed next to the Glen Canyon Park, which is a recognized significant natural resource within the City, with its rare species and wildlife. **Exhibit 2** (Naturalist David Schmid's correspondence); **Exhibit 3** (Glen Canyon Park information); **Exhibit 4** (Glen Canyon Master Plan, 2011); and **Exhibit 5** (Glen Canyon Park Birds, Habitat, and the Significant Natural Resource Areas Management Program.)

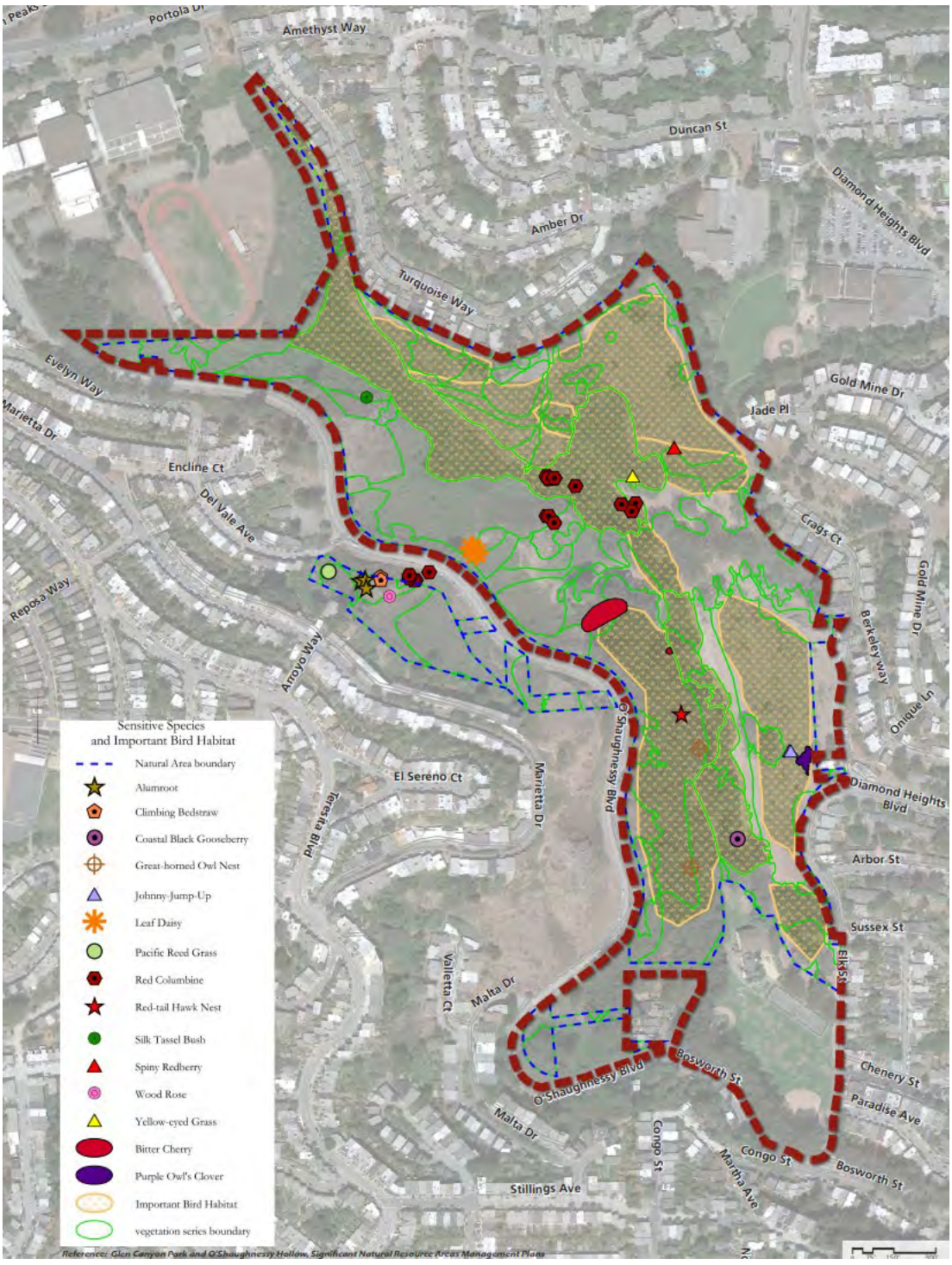
Notably, as the Glen Canyon Master Plan describes it:

> **Site Description:** Glen Canyon Park has incredible, yet often under-recognized, historical, ecological, and recreational features. This urban canyon offers 60 acres of biologically diverse urban wilderness with trails, educational displays, and vista points. **Glen Canyon Park** is **one** of San Francisco's 31 **significant natural resource area**s, with **three native plant** communities: riparian, grassland, and coastal scrub, as well as a **17-acre exotic forest of Eucalyptus trees** near the entrance to the Park.
>
> The canyon is home to **170 species** of **native plants** (including coyote brush, sticky monkey flower, coastal sage, and bee plant), **43 species** of

> birds (such as white-crowned sparrow, black phoebe, red-tailed hawk, red-shouldered hawk, and great horned owl), and **30 species of butterflies**. Other **wildlife** includes **skunk**, **raccoon**, **coyote**, western **fence lizard**, and **meadow** mouse.
>
> (**Exhibit 4,** p. 3, emphases added.)

As noted, Glen Canyon Park is one of the City's "significant natural resource " areas of invaluable environmental importance. The Park was the original territory of the Muwekma Ohlone Tribe. It is a 70-acre natural oasis, serving as a vital green space in the heart of the City. The Park is situated in a deep canyon, with Islais Creek flowing through it. The park is surrounded by the residential communities of Diamond Heights and Miraloma Park, creating a unique urban wilderness experience and setting.

The park's "significant natural resource" areas play a crucial role in maintaining local biodiversity, which has suffered at times, including the loss of natives plant and animal species, underscoring the need for environmental protection at the Project site. Conservation efforts are in place to protect native San Francisco species and their habitats within the park and to encourage people to participate in such efforts. **Exhibit 2**. Community improvement workshops and public outreach efforts have been instrumental in preserving the natural scenery. The park plays a crucial role in prioritizing environmental stewardship among neighbors and local residents who are actively involved in initiatives aimed at preserving its natural resources and educating children and the public generally about local ecology. Glen Canyon Park is home to several native San Francisco species, including the endangered San Francisco garter snake, Mission blue butterfly, and Scarlet Monkeyflower, which is presently the subject of conservation efforts that could be undermined by the Project's impacts. **Exhibit 2**. The park provides a unique opportunity for wildlife observation, allowing visitors to learn about the urban ecosystem and the importance of conservation efforts. As part of a broad strategy to maintain the park's ecological integrity, recent initiatives have been aimed at restoring native habitats within the park, including the removal of non-native trees and planting of native species to enhance biodiversity and create a fire break. **Exhibit 2**. The park thus supports essential and critical biodiversity. It provides an important habitat for birds, including nesting, breeding, and roosting grounds, including for raptors and birds of prey. Mammals, birds, and invertebrates, including coyotes, owls, hawks, among many other animals, all rely on the Park's natural resources for survival, as indicated in the image below, taken from the City's Recreation and Park Department's website:

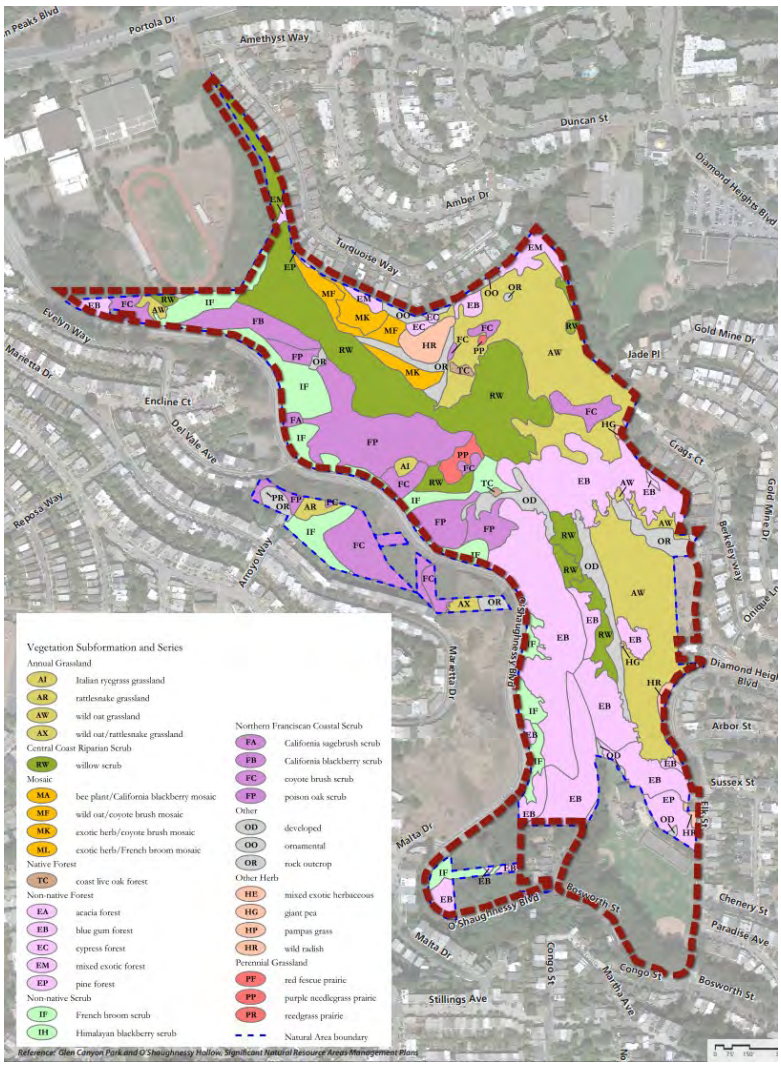


Source: https://sfrecpark.org/DocumentCenter/View/1369/Natural-Resources-PDF

Recreation at Glen Canyon Park is very lively and invaluable to the many people that visit there. The Park is part of the Cross Town Trail and has become a beloved destination for both residents and visitors alike. Wildlife observation is a popular activity within the park, allowing visitors to gain a deeper understanding of their urban ecosystem. The Park offers a rich network of hiking

trails, providing opportunities for both casual walkers and serious hikers to explore the park's natural wonders. The park's urban hiking trails are particularly popular, as they allow visitors to experience the beauty of nature within the City's limits. One of the trails begins at Amber and Turquoise and travels just below the steep hill behind the Police Academy with Oak Trees above and grassy canyon below. George Christopher Park and Playground and Glen Canyon Park serve as focal points in their communities and help foster a deep sense of community among residents. The Playground is used daily for softball and soccer, and for adults and families walking the perimeter of the ballpark. However, the proposed wireless tower would be less than 20 feet from "center field" and near a children's play area that is regularly utilized by a nursery school and children of all ages on a daily basis.

The importance and ramifications of disrupting tree root systems cannot be underscored enough. The required digging to install the massive tower and its foundation will significantly disrupt the roots of the "mixed exotic oak forest" and "blue gum forest" present at the Project site and its vicinity, as indicated in the map below, also taken from the City's Recreation and Park Department's website:



Source: https://sfrecpark.org/DocumentCenter/View/1369/Natural-Resources-PDF

The tower's installation threatens to cause irreversible damage to both the existing tree coverage and underlying root system. When tree roots are damaged in a forest, it can significantly affect nearby trees through several interconnected pathways, including by disturbing underground mycorrhizal fungi linking the trees. These fungal networks link root systems and allow trees to share water, nutrients, and even chemical signals. When roots are damaged, these connections can be severed, reducing the injured tree's ability to receive support from neighboring trees and cutting off its ability to share resources with others. If one damaged tree succumbs, it can set off a chain reaction with far-reaching impacts that destabilizes the local environment. For instance, loss of tree coverage may allow more sunlight to reach the forest floor, dropping humidity levels, allowing increased wind exposure, stressing surrounding trees that are adapted to different conditions. Root damages can also make trees more susceptible to diseases pathogens, pests, and less able to

withstanding environmental elements, such as high winds. Such problems can spread to neighboring trees. For example, root rot fungi can move from weakened trees to healthy ones through root contact, and bark beetles often colonize stressed trees before spreading to nearby healthy trees. Damaged root systems can reduce soil stability, potentially affecting the anchoring of nearby trees and increasing erosion risk that impacts the whole stand. In addition, countless invertebrates and other irreplaceable soil biota have coevolved with the trees for over 150 years and rely on this stability for their survival.

Situating the Project next to this wildlife habitat and critical environmental resource can have destructive effects on the Glen Canyon Park, in light of the hazards the Project entails, as well as the fact that the construction and subsequent operation of the highly charged wireless facility and its EMF, noise, and odors may directly affect and jeopardize native plant species and wildlife in the Glen Canyon Park.

As just one such example of the EMF effects on wildlife and biological resources is the known effect of wireless facilities on bees, birds, and plants. **Exhibit 6** (Articles re: Wireless Facility impacts on biological resources). As stated in the Article and excerpted from various scholarly reports and articles:

> Fig. 3 Effects of **electromagnetic fields** on **Honeybee health**: EMF exposure is proposed to induce both behavioural changes (reduced foraging, increased distress signals, and impaired navigation) and cellular/physiological effects (membrane damage, mineral imbalances, reproductive impairment, stress markers, and genic imbalances). These changes can **lead** to **individual bee death** and potentially **disrupt colony dynamics** and **survival**, which can **ultimately** boost the **process** of **colony collapse disorder**…

(**Exhibit 6,** p. 1, emphases added)

The Article compilation further provides reports of EMF effect on other wildlife and plant species:

> "EMF exposure studies have found ...in **plants** **reduced growth**, **increased infection** and **physiological** and **morphological changes** (Balodis et al. 1996, Haggerty2010, Waldmann-Selsam et al. 2016, Havas and Symington 2016, Vian et al. 2016, Halgamuge 2017);
>
> in **birds**, **aggressive behavior**, **impaired reproduction** and **interference** with **migration** (Southern 1975, Larkin and Sutherland 1977, Balmori 2004, Balmori and Hallberg 2007, Everaert and Bauwens 2007, Fernie et al. 2010, Engels et al. 2015, Wiltschkoet al. 2015);

> in **livestock**, especially dairy cows, reduced productivity, impaired reproduction, and sudden death (Burchard et al. 1996,Loscher and Kas 1998, Hillman et al. 2013, Stetzer et al. 2016);
>
> in **rodents**, increased **cancer risk** in three long-term studies (Chou et al 1992, NTP 2018, Falcioni et al. 2019);
>
> in **amphibians** (Balmori 2006, Balmori 2010) and **insects** (Cucurachi et al. 2013), **deformities** and population **decline**;
>
> and in **honey bees**, aggressive behavior, reduced learning, reduced productivity, swarming and abandoning hives (Harst et al.2006, Pattezhy 2009, Warnke 2009, Favre 2011, Kumar et al. 2011, Sahib 2011, Shepherd et al. 2019)." (**Exhibit 6,** emphases added)

The Project may, therefore, necessarily have an adverse impact to the adjacent critical environmental resource of the Glen Canyon Park and its biological resources by exposing those to its seismic, fire, chemical hazards and EMF. Therefore, the Class 3 exemption (even if it applied, which it does not as a matter of law) would be inapplicable in this case in light of the *location* exception under CEQA Guidelines section 15300.2(a).

Further, the *cumulative impact* exception under CEQA Guidelines section 15300.2(b) applies here, since location of a *macro* tower on the Project site will necessarily lead to the location and proliferation of similar wireless facilities.

In addition, the *significant impact,* also known as the *unusual circumstances* exception under CEQA Guidelines section 15300.2(c) applies here, in light of the unusual circumstances of:

(1) the massive design, location and size of the Project (a 104-feet monopine or monopole with its numerous antennas, over 500 sf facility and a 190 gallon fuel tank);

(2) its potential landslide hazards and history of soil instability and collapse on the Project Site, especially during winds and earthquakes which are not uncommon for the Project site and for San Francisco;

(3) its fire hazards and exacerbation of fire risks, including considering the presence of Glen Canyon nwhich are generally prone to fire;

(5) its use of the 190 gallon fuel tank which may further lead to soil contamination and air pollution, as well as noise and disturbance to the surrounding community, including residents nd wildlife;

(6) its proximity to the children's playground and densely populated residential area, and structures of historical significance.

As explained in greater detail further below, the Project may have significant destructive impact on the surrounding people and critical biological resources and may further exacerbate the existing hazards on the Project site.

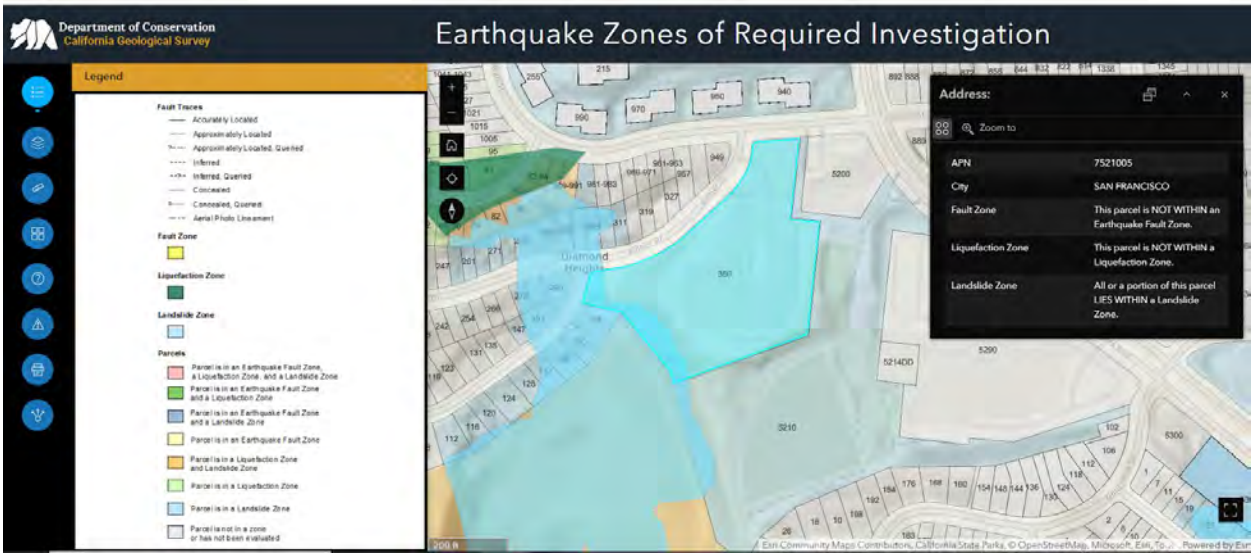
Lastly, the Project would qualify for the *historic resource* exception under CEQA Guidelines section 15300.2(f), since the Project, in the likely and foreseeable event of landslide or fire hazard, may adversely impact the nearby St. Nicholas Church, built in 1960. **Exhibit 25** (St. Nicholas Antiochian Orthodox Church Parish Information). While the County reviewed the Project Site and the building of the Police Academy itself for historic significance, it failed to review the potential historic significance of the nearby church and other nearby structures of historical import. Based on the rich history of the Church and its architectural style and age, it may well qualify as a historical resource and landmark by the City.

III. THE PLANNING COMMISSION FAILED TO FULLY CONSIDER AND ANALYZE THE PROJECT'S SEISMIC HAZARDS AND ASSOCIATED RISKS.

The Planning Commission has received numerous concerns and significant evidence about the Project's being proposed at a site with a history of landslides and seismic failures. We hereby fully incorporate herein all of those public comments and evidence by reference and direct the Board of Supervisors to such evidence.

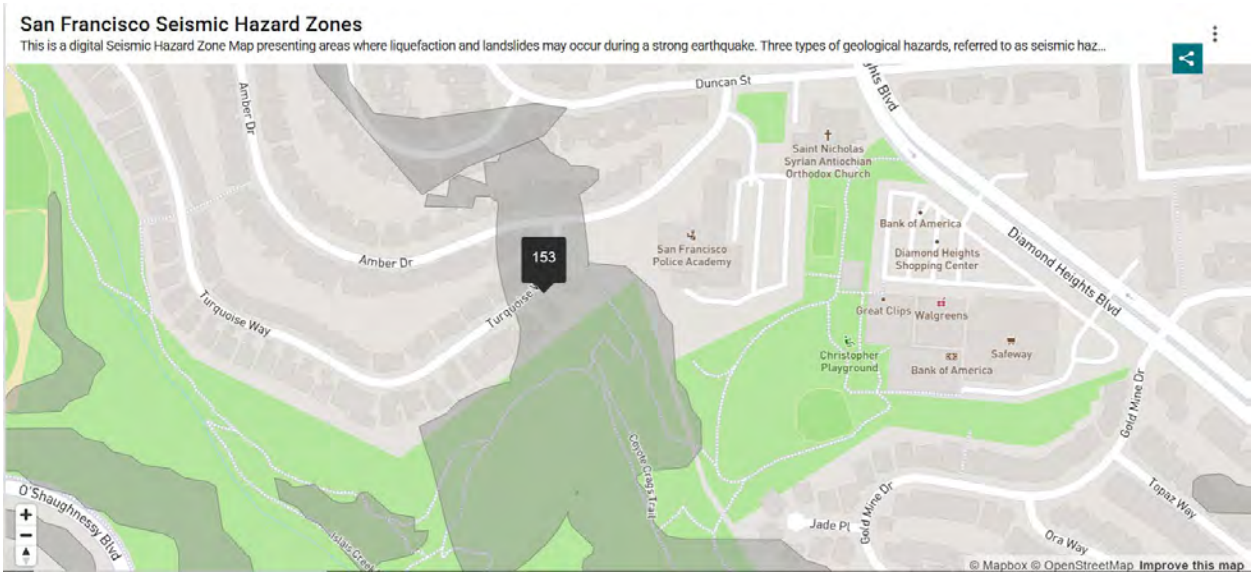
In addition, *nowhere* in the County's 9/25/2025 Staff Report for the Project, did the County Planning Department duly disclose to the Planning Commission the undeniable fact that the Project is located within the *landslide* zone as mapped by the State of California in its EQ Zapp: California Earthquake Hazards Zone Application map[2], as shown in the screenshot below:

[2] See, https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/



The California State map screenshot above expressly states that the site at 350 Amber Drive, San Francisco – in turquoise – "LIES WITHIN a landslide zone."

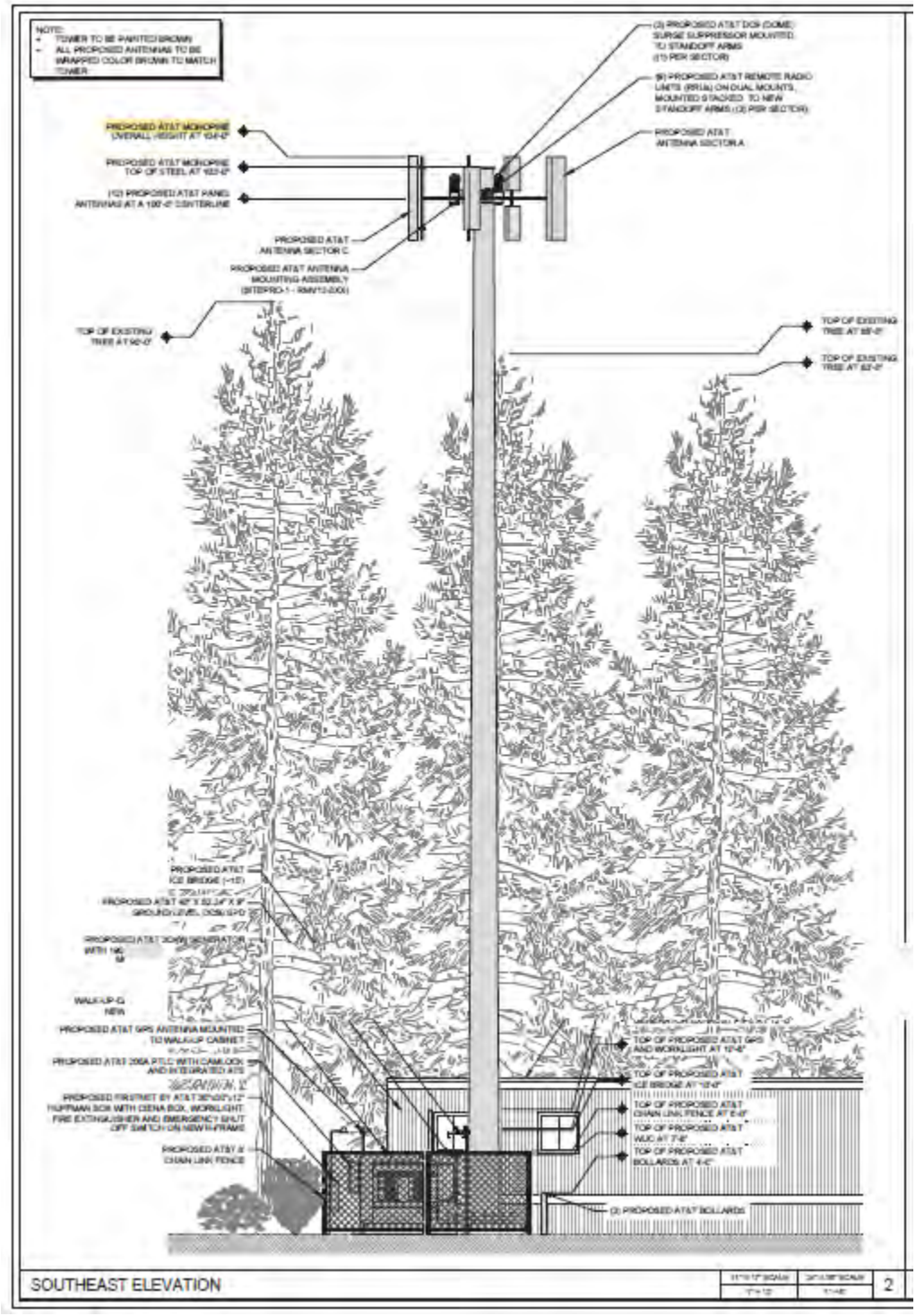
Notably, San Francisco's local seismic map[3] similarly confirms that the Project site lies within the landslide zone, as shown in the screenshot below:



The above noted maps, along with the Project site's long and undeniable history of landslides and seismic failures as noted in prior public comments, conclusively confirms that the Project's siting on such unstable soils may be a critical error and may have irreversible consequences.

[3] See, https://data.sfgov.org/-/San-Francisco-Seismic-Hazard-Zones/7ahv-68ap

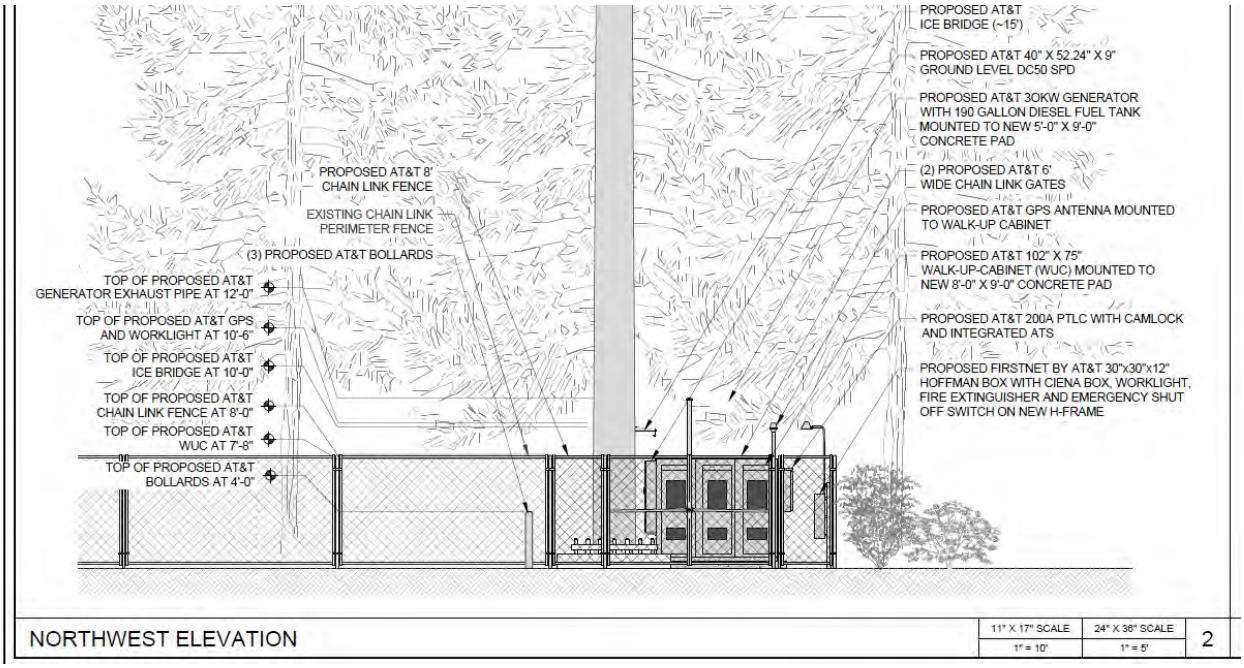
To wit, the Project proposes a 104-feet tall monopine or monopole, surrounded by 90-feet eucalyptus tree grove, as depicted on the screenshot from the Project plans below:



Undeniably, to secure this 104-feet tall monopine or monopole to the ground and to do it in the unstable soils the Project site lies on, the 104-feet tall monopine or monopole should be mounted about 90 feet deep in the ground, which may and will affect the tree roots of the nearby eucalyptus grove, the groundwaters, and will also affect the natural drainage patterns on the Project site and obstruct their course, creating runoff and flooding problems.

In addition, unlike trees with massive roots that not only hold the tree secure to the ground but also secure surrounding soils with their roots, the 104-feet tall monopine or monopole may become highly susceptible to the winds and may simply give-in and collapse, causing significant fire and other safety risks to nearby residents and their environment. Indeed, the nearby Diamond Heights community and vicinity are some of the windiest locations in the entire City and have recently experienced red flag warnings from high wind events. Climate change has only exacerbated wind impacts in the area and could compound and exacerbate fire risks by increasing the potential for spread and limiting emergency response efforts.

Moreover, per the Project plans, the Project proposes a 20'-0" X 27'-6" AT&T Telecommunications facility (~550 SQ. FT.) and a 190-gallon fuel tank generator, as shown on the screenshot below from the Project plans:



The above-described massive base, along with its 190 gallon fuel tank generator, will necessarily have to be secured in place through a substantial amount of grading, excavating, and a concrete pad, which may require removal of or damage nearby trees

and changes to natural drainage patterns, which may, in turn, cause a landslide event and the associated public health and safety hazards, apart from the adverse impacts to the surrounding Glen Canyon Park and its biological resources.

The Planning Commission's *omission* of the above-noted landslide risks and associated hazards and public health and safety risks in assessing whether the Project is properly sited constitutes cannot withstand judicial scrutiny.

IV. THE PLANNING COMMISSION FAILED TO FULLY CONSIDER AND ANALYZE THE PROJECT'S FIRE HAZARDS AND ASSOCIATED RISKS.

The Planning Commission has received numerous concerns and significant evidence to support the fact that the proposed Project is a fire hazard, which cannot – and should not be placed – near the critical natural resource of the Glen Canyon Park, in densely populated residential community, near recreational areas and another park, and just next to the grove of 90-feet eucalyptus trees known for their fire-prone features.

We incorporate by reference all of those public concerns about the Project's fire hazards submitted to the County to date, including the comments by Susan Foster, co-founder of the California Fires & Firefighters Organization and also a writer and an Honorary Firefighter with the San Diego Fire Department and a member of the 2001 Task Force in San Diego County that created the County's first wireless ordinance, among her many other achievements. That ordinance survived a challenge all the way to the U.S. Supreme Court. Susan Foster has worked with rank-and-file firefighters in California and across the country over the last 20 years on the issue of RF radiation health and safety." Susan Foster is also "a Fire Safety Consultant asked by then-Mayor Mikke Pierson of Malibu to assist in creating an ordinance for wireless communications facilities (WCFs) that would elevate the level of safety for Malibu by reducing the risk of telecommunications fires."

For the ease and convenience of the Board of Supervisors, we attach some of the comments and evidence presented by Susan Foster as **Exhibit 8** hereto. Briefly, in all of her comments and attachments, wireless facility fire expert Susan Foster confirms the inevitable fire hazards the Project will expose the nearby community to, the proximity of the Project to people and environmental resources of critical concern, as well as facts of prior fires which were caused by wireless facilities, akin to and even much smaller than, the Project's proposed 104-feet tall monopine or monopole with its 500 square feet base and 190 gallon fuel tank generator.

In addition, we hereby present two White Papers: first on fires in the City of Malibu authored by Susan Foster, and second, on LA County Wireless Ordinance authored and co-authored by the fire expert Susan Foster and an expert electrician, Tony Simmons. **Exhibit 9** (Malibu White Paper); **Exhibit 10** (LA County White Paper). The referenced White Papers contain testimonies of firefighters, describing the specific danger and complications posed by the wireless facility caused fires, the high and severe risks of those fires for firefighters, and the extreme difficulties in putting out such fires, in light of the need to wait for at least 30 minutes and at times for hours for the wireless facility to get deenergized before trying to extinguish the fires. In addition, as the experts and the firefighter witnesses they reference show, fires caused by wireless facilities cannot typically be extinguished with water, as with other fires, and require a more resource intensive response.

Tony Simmons, P.E., who co-authored the above-referenced Malibu White Paper, updated by Susan Foster on February 16, 2022, is a "professional engineer with decades of electric fire safety experience" who "has synthesized an electric fire safety protocol tailored to the specific needs of fire-prone Malibu." Mr. Simmons is an "electrical engineer licensed by the States of California and Nevada. He is a recognized subject matter expert on electrical safety. As an employee of NV Energy, which served customers in California and Nevada, he was responsible for ensuring that no gap existed between the safety standards for customer-owned equipment and utility-owned equipment. Mr. Simmons designed a specialized test facility that integrated electrical equipment from East Asia, Europe, and the United States. This test site incorporated grounded and ungrounded electrical systems from all three regions and required Mr. Simmons to integrate standards from three regions to adhere to the technical requirements of the U.S. National Electric Code." **Exhibit 9.**

As evidenced by extensive research and comments by Susan Foster and Tony Simmons, P.E., wireless facilities may and do cause fires, that can be highly precarious and challenging to contain.

Further, as legally defined, "wireless towers" encompasses not only the main structure and tower itself, but also the tower's accessory or associated structures, which can also create and exacerbate fire risks and hazards. California law defines wireless towers as follows:

a. As described in 47 C.F.R. §1.6100(b)(9), wireless "**towers**" are a "structure that is built for the sole or primary purpose of supporting any FCC-licensed or authorized antennas, including on-site

> fencing, equipment, **switches**, **wiring**, **cabling**, power sources, shelters, or cabinets **associated** with that **tower** but not installed as part of an antenna."
>
> b. Similarly, "**associated equipment**," as defined under 47 C.F.R. Section 1.6002(c), or any successor provisions, includes "equipment, **switches**, **wiring**, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and when collocated on a structure, is mounted or installed at the same time as such antenna."
>
> c. "Wireless facility" is the "antenna facility used for the provision of wireless services at a fixed location, including, without limitation, any **associated support** structure(s)."
>
> f. "**Support structure**" means County **infrastructure**, streetlight **poles**, **towers**, or utility poles."

There is no doubt that the Project's proposed wireless macro facility would introduce substantial associated structures beyond just the main tower, including extensive wiring, which can independently carry their own fire risks and exacerbate such hazards.

As summarized in the LA County White Paper authored by Susan Foster and Tony Simmons, P.E., fires caused by wireless facilities are unusually severe and hard to extingush as they need time to deenergize and should not be addressed with water:

> "We also provide several examples of the ways electrical fires can start in cell towers and why the new small cell infrastructure poses unique threats to Malibu. In addition, we demonstrate that setbacks and separation will accommodate telecommunications yet allow enough space and distance for residents to escape should an electrical fire still occur. **Electrical fires cannot** be **extinguished** by **homeowners** or **even firefighters until power** to the **facility** is **cut** by the **utility**."

(**Exhibit 10,** p. 9, emphases added.)

> . . . .
>
> "In some instances, **de-energization** of a cell tower has taken **over 60 minutes**. In such a circumstance, **distance** from **residences**, **schools** and **other buildings** may mean the **difference** between **life** and **death**."

(**Exhibit 10,** p. 10, emphases added.)

> . . . .

> "**Homeowners** should **never fight** a **cell tower fire** even if it is directly in front of their home. To **fight** an **electrical fire before** the **tower** has been **de-energized** by the local utility (10 to 60 minutes) **risks electrocution**. Residents of Malibu must **flee their homes** in the event of an electrical fire and that is why **distance between towers** and **setbacks** from homes is **critical**."

(**Exhibit 10,** p. 10, emphases added.)

As further opined by expert Susan Foster, the 5G technology – where the allegedly 4G Project is undoubtedly headed after it gets approved – poses unusual and more severe fire hazards, due, in part, to their need for deenergizing in case of fire, and densification:

> Wireless Communications Facility (WCF) **proliferation** increases the possibility of **electrical fires**. As such, **electrical fire** safety became a priority for Malibu, a city that has burned twice at the hands of **telecommunications** equipment in just the last 15 years alone.

(**Exhibit 10,** p. 8, emphases added.)

> "It is not the frequency of cell tower fires that concerns us the most. It is the **severity** of what a **single cell tower fire** can do. The **biggest risk** is that WCFs [] have been brought **much closer** to local populations and those installations are much **more densely** situated. Every electrical device including every WCF must be **deenergized** before a fire can be fought. On a good day that can happen in 10 minutes. Some cities find that it is 30 minutes or more before the electric company cuts the power. **If** the firefighters fight the fire **before** the tower is **deenergized**, they can be **electrocuted**. A **lightning strike** is a type of transient event that may lead to **WCF catastrophic** failure. Malibu residents will recall in May of 2019, just before Memorial Day weekend, several beaches were closed in Malibu because of a lightning storm that created unsafe conditions. **Thus, the placement of WCFs must allow time and space for escape because a fire originating in a WCF must not be fought by residents or by firefighters until SCE has turned off the power. This is why we propose separation and setback requirements as strategies to mitigate risk to residents**."
>
> (**Exhibit 10,** p. 24, emphases added.)

Furthermore, as a firefighter testified in Susan Foster and Tony Simmons' LA County White Paper,

> "If the fire involves **energized equipment**, **do not** put **water** on it. Use water only to extinguish anything like trees, grass, vegetation, etc. that it may spread to, and then **use water** in **short bursts** if it's adjacent to the pole. Call the utility company immediately so they can de-energize. **Keep people back** for **2 spans** in either direction and make sure **all personnel** and equipment **stay out** from under the **power lines**. Focus on **public safety** and **exposure** protection until it's confirmed that the power has been shut off."
>
> (**Exhibit 10,** p. 25, emphases added.)

To the extent the County here may be relying on regulatory compliance – i.e., the Project's compliance with the building code or electrical code – to wash its hands off of the above-described severe fire (and landslide) hazards that the Project may and will bring to the Project site, such reliance is misplaced. As the January 2025 wildfires in Los Angeles County, as well as other wildfires that occurred in California, confirmed, the devastation that follows a wildfire is immeasurable and should not be taken lightly. And no building, electrical or seismic codes or regulations may protect the public from such devastation, as evidenced by numerous articles on the recent LA Fires, which took weeks to contain and extinguish. **Exhibit 11** (Articles on LA Fires in January of 2025).

Compounding the above-noted highly likely and inevitable fire hazards of the Project, it is also proposed near *eucalyptus* tree grove, as shown on the screenshot below from one of submissions presented by Susan Foster:



(*See also* **Exhibit 8**)

The Planning Commission was informed – but disregarded – the fact that *eucalyptus* trees are particularly prone to fires, in light of their oily leaves. In fact, in light of those fire hazard concerns, numerous cities have engaged in the removal of the eucalyptus trees to prevent fire hazards, as evidenced by numerous articles and undisputed evidence. **Exhibit 12** (Articles on eucalyptus trees and various measures to remove those). To wit, as an Article by the National Park Service, U.S. Department of the Interior described the fire hazard problem with eucalyptus trees:

> The **fragrant oils** in eucalyptus **leaves** can be very pleasing, but also **alter** soil chemistry, and **can become highly flammable** when the **leaves accumulate** as **surface fuel**. Studies have shown that native species are displaced in **eucalyptus groves** and **fuel loads are higher**. Without active management, historic landscapes can become overgrown, biological diversity can decline, and the **potential** for **catastrophic wildfire** can **increase**.
>
> Eucalyptus management at Golden Gate National Recreation Area strives to achieve three main goals—**fire safety**, **historic preservation**, and **ecosystem health**.

(**Exhibit 12,** emphases added.)

As another article described the problem and benefits of *eucalyptus* trees:

> Eucalyptus **trees** are simultaneously **dry** and **filled** with **flammable oil**. They shed **long**, **shaggy debris**, covering the **ground** with **dry fuel** for **wildfires**, and when they **catch fire the oil** in them **burns hot** and **fast**. **Their seed pods** can **explode** in a **wildfire**, **shooting embers** across the landscape….
>
> On the other hand, they provide **vital shade** and **habitat** for **native** and **endangered species**. Their **tall crowns** and **long limbs collect dew** that **rains down** on the forest floor after foggy San Francisco nights.

(**Exhibit 12,** emphases added.)

To be clear, we are not advocating for the removal of the *grove* of 90-feet trees from the Project site, since those trees, apart from their natural benefits, also help to withstand and mitigate impacts from winds. **Exhibit 13** (Article re: Windbreak from Eucalyptus trees) and protect the site from landslides with their roots, which is critical for the site within a known landslide zone.

It is important to underscore the problem posed by the Project, which will significantly increase the fire hazards and destruction of those eucalyptus and oak

trees by both bringing an inevitable fire hazard of a 104-feet tall and very heavy electrically-powered tower next to such highly-flammable trees and also potentially damaging and killing those trees and their roots by the placement of the 104-feet tall monopine or monopole and its accessory 500 square foot structure on a concrete pad, along with the 190 gallon fuel tank generator next to it.

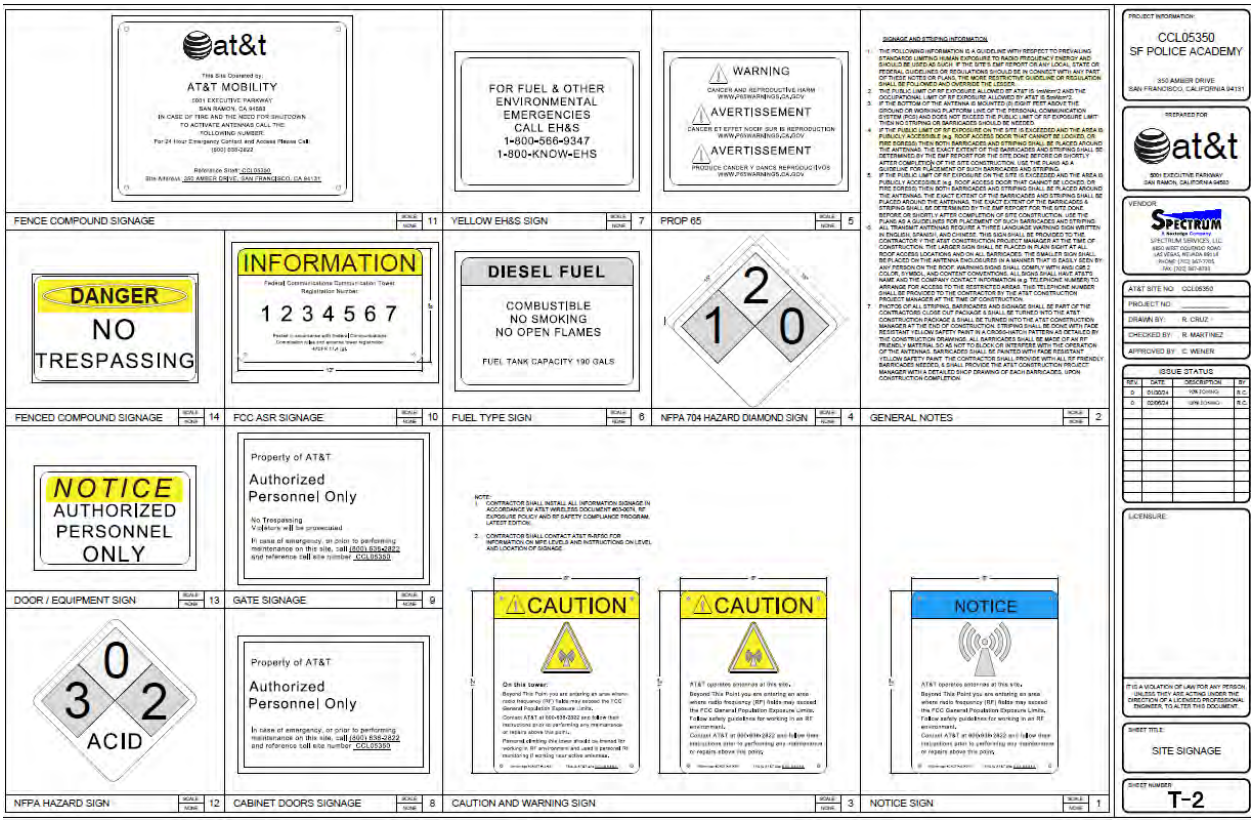
While the above-described fire hazards caused by the Project would undoubtedly lead to devastating destruction of the Glen Canyon Park and its wildlife and biological resources, those fire hazards may become extremely dangerous for the residential community and residents, including vulnerable populations like seniors and children in the nearby nursery schools and children's playground, people at the shopping center or people at the nearby church – all near the Project site and its vicinity.

For these critical safety reasons too, Appellant urges the Board to grant the instant appeal, to deny the Project outright, to set aside the findings of the Planning Commission, or – at a minimum – to require preparation of an EIR, to duly analyze and mitigate all the fire hazards and the public health and safety risks raised by the Project's siting, which were ignored by the County or the Planning Commission.'

V. THE PLANNING COMMISSION FAILED TO FULLY CONSIDER AND ANALYZE THE PROJECT'S CHEMICAL HAZARDS AND ASSOCIATED RISKS.

The Planning Commission plainly disregarded the fact that the Project will introduce a 190 gallon fuel tank generator on the site. The problem is, such fuel tank generators *do leak*, and they often leak a dangerous combination of hazardous substances, including *benzene*. (**Exhibit 14** [Articles re: Generator Leak and Benzene Effects on Human Health].)

In fact, the Planning Commission conveniently disregarded the fact that the Project plans acknowledge these chemical and other hazards of the Project and identify numerous *hazard* signs to be installed on the Project site, as shown in the screenshot from the Project plans below:



According to the California Lung Association, diesel exhaust is a complex mixture of thousands of gases and fine particles, or particulate matter that contains more than forty (40) hazardous substances and air contaminants. These substances and contaminants include many known or suspected cancer-causing substances, such as benzene, arsenic and formaldehyde. The microscopic particulate matter is capable of penetrating and reaching essential organs. Children can be especially vulnerable because of their development and faster breathe making them more susceptible to pollution, especially fine particulate matter. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. New research from the national library of medicine is linking air pollution to impacts on children's neurological systems and development such as IQ and cognitive ability.

Siting a 190 gallon fuel tank next to a children's playground may also adversely affect children's health, especially since children are especially vulnerable and susceptible to benzene exposure, relative to adults. As stated in an Article on this issue:

> In particular, the **pharmacokinetics** of **benzene** differ widely between **children** and **adults** due to children's **incomplete** metabolic systems, rapid tissue regeneration, immature host defenses, activity patterns, and

> high rates of infection by respiratory pathogens. 22,23 Thus, **children** are **more susceptible** to the effects of **environmental toxic pollutants**. However, the **susceptibility** to **benzene** may vary due to its effect that arises, in part, from genetic variations in its metabolism, DNA repair, genomic stability, and immune function.

Exhibit 16 (Article re: Benzene Effect on Children).

Critically, benzene is known for its adverse and significant impacts on human health, apart from other hazards. As one of the provided articles describes:

> Short encounters with high levels of benzene can cause **drowsiness**, **dizziness** and **unconsciousness**, while **chronic exposure** has long been linked to **leukemia** and other **blood cancers**. Recent studies also link the chemical to **diabetes** and **reproductive problems**.

(**Exhibit 14,** emphases added.)

Moreover, the 190 gallon fuel tank generator may affect residents' health from its *operation,* whereby the generator produces noxious benzene odors. **Exhibit 15** (Article re: Generator Odors). As the Article states:

> The complaint against diesel generators comes from the high temperatures it produces, along with the distinctive smokey odor. This combination of a noxious odor and high temperature causes problems when the generator is operating. Placement of the exhaust stack and changing wind direction can cause the smoke, heat, and odor to re-entrain into the facility or a neighboring building.

Exhibit 15.

In addition, siting of a 190 gallon fuel tank generator will affect the nearby biological resources of the Glen Canyon Park and other parks. Notably:

> Benzene can volatilize into air from soil and water. Once in the atmosphere, benzene breaks down (biodegrades) within a few days. In soil and groundwater, the biodegradation process is slower.
>
> Benzene is slightly soluble in water and can migrate through the soil column into groundwater. Because benzene is a light non-aqueous phase liquid (LNAPL) it can collect on top of the water table. Benzene biodegradation in groundwater can take days to years, depending on oxygen concentration, temperature, and the presence of favorable bacteria.

Exhibit 17 (Article re: Benzene Characteristics).

Thus, per EPA[4] official website information and report, "[i]n animals, chronic inhalation and oral exposure to benzene produces the same effects as seen in humans." and "[a]nimal studies show neurologic, immunologic, and hematologic effects from inhalation and oral exposure to benzene.." **Exhibit 18** (EPA Report re: Benzene Effects). This translates into adverse effects to the wildlife and biological resources surrounding the Project that the Project will cause, apart from impacts on public health.

Thus, in light of these significant concerns, Appellant urges that the Boards consider the above-noted hazardous effects of the Project on the health and safety of the nearby residents and particularly children, given the Project's proximity to an adjacent children's playground and visitors of the nearby parks. We further urge the Board of Supervisors to consider the effect of the Project on the surrounding critical natural resource and wildlife of Glen Canyon Park.

VI. IN SUM, THE BOARD SHOULD APPROVE APPELLANT'S APPEAL OF THE PLANNING COMMISSION'S CEQA EXEMPTION DETERMINATION FOR THE PROJECT.

In sum, in light of the Project's undeniable and potentially significant impacts on the environment and natural resources, public safety, and human health based on its seismic, fire, and chemical hazards, the Project's CEQA Class 3 categorical exemption must now be reversed and the Project denied. Alternatively, and at minimum, the Project should be required to undergo additional environmental review, including a comprehensive review of potential mitigation measures that may help address and ameliorate the Project's significant impacts as well as viable project alternatives.

For all of the reasons stated above, the Planning Commission's approvals and its CEQA Class 3 exemption determination must be set aside, because the Project was approved without an adequate CEQA clearance and since the Project will have significant impacts, requiring, at a minimum, preparation of an EIR before any ultimate approval or full entitling of the Project may occur.

Lastly, Appellant urges the Board to consider the policy objective of CEQA in hearing this appeal, namely to encourage public participation and input in thoughtful and well organized land use planning that carefully considers and addresses environmental impacts from proposed developments. "CEQA compels an *interactive process* of assessment of environmental impacts and *responsive* project *modification* which

[4] See, https://www.epa.gov/sites/default/files/2016-09/documents/benzene.pdf

must be *genuine*. It must be *open* to the public, premised upon a *full* and *meaningful disclosure* of the scope, purposes, and effect of a consistently described project, with *flexibility* to *respond* to *unforeseen insights* that emerge from the process. In short, a project must be open for public discussion and subject to agency modification during the CEQA process." *Concerned Citizens of Costa Mesa, Inc. v. 33rd Dist. Agricultural Assn.*, 42 Cal.3d 929, 936 (1986).

VII. CONCLUSION.

In sum, the Planning Commission's approvals for the 350 Amber Drive Project on September 25, 2025 must now be reversed by the Board because they are fundamentally and demonstrably flawed. At a high level, the Project is facially ineligible for the Class 3 Categorical Exemption, as a massive, 104-foot wireless tower simply does not qualify as a "new, small facility" under the clear statutory language of CEQA Guidelines Section 15303. The Project's eligibility for this exemption is further undermined because it does fall under any of the examples enumerated in the statute. The County's reliance on an inaccurate version of the Class 3 categorical exemption compounds that problem and contravenes the objectives of CEQA.

Even if the Project were eligible for the categorical exemption, it must nevertheless be required to undergo further environmental review due to the applicability of several *exceptions* triggering further review. Specifically, the Project implicates and triggers the location, cumulative impact, significant effect, and historical significance exceptions under CEQA Guidelines Section 15300.2 based on its seismic, fire, and chemical hazards as well as its proximity and threat to critical natural resources, recreational areas, nearby residencies, vulnerable populations such as seniors and children, and significant historical resources.

The Board should also accept and hold a public hearing regarding Appellant's CUA appeal filing and reverse the Commission's Conditional Use Authorization and Shadow Findings. The Commission's findings were improper and based on informational flaws and the Project itself is inconsistent with the City's own General Plan and land use policies.

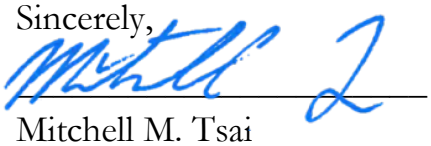
Appellant urges the Board to approve both the CEQA and CUA appeals in their entirety, reversing the Planning Commission's CEQA Exemption Determination and its approval of the Conditional Use Authorization and Shadow Findings, and deny the Project outright. The totality of the evidence, including the clear legal inapplicability of

the CEQA exemption and overwhelming environmental and public safety concerns, compels the denial of a project incompatible with the City's own General Plan and land use policies.

Should the Board nonetheless permit this controversial Project to move forward, it is legally obligated to approve the CEQA appeal and require the preparation of a full Environmental Impact Report (EIR) for the Project. An EIR is the highest form of environmental review and is especially necessary here to accurately assess the Project's significant impacts on the sensitive environment, evaluate feasible mitigation measures, and consider less destructive project alternatives. The Project's mass, scale, associated seismic, fire, and chemical hazards, and critical setting in one of San Francisco's naturally significant areas warrant the most rigorous public disclosure and environmental analysis to ensure the protection of the impacted community and the natural resources of Glen Canyon Park. Such reasoned and detailed review regarding the Project's impacts are also critical and required by law, in the event the case proceeds to judicial review. Lastly, Appellant respectfully requests that the Board direct City Staff and the Project applicant to address the public's concerns and comments regarding the Project.

Should the City have any questions or concerns regarding this correspondence, please do not hesitate to contact our office.

Sincerely,



Mitchell M. Tsai
Omar Corona
Attorneys for Appellant

Attachments:

Exhibit 1: CEQA Exemption Determination of the County;

Exhibit 2: Naturalist David Schmidt's correspondence in support of this appeal, describing Project impacts;

Exhibit 3: Glen Canyon Park information, San Francisco Recreation and Parks;

Exhibit 4: Glen Canyon Park Master Plan;

Exhibit 5: Glen Canyon Park Birds Habitat;

Exhibit 6: Effects of Wireless Radiation on Birds and Other Wildlife – a March 3, 2025 compilation of scientific and expert reports on electromagnetic radiation safety;

Exhibit 7: (intentionally omitted)

Exhibit 8: Fire expert Susan Foster's prior submissions to the County and the Planning Commission for the Project;

Exhibit 9: Fire Expert Susan Foster's and electrical engineer expert Tony Simmons, PE's authored Malibu White Paper;

Exhibit 10: Fire Expert Susan Foster's authored County of LA White Paper;

Exhibit 11: Compilation of Articles on January 2025 LA Fires and related destructions;

Exhibit 12: Articles on Eucalyptus trees;

Exhibit 13: Article on the use of Eucalyptus trees for a windbreak;

Exhibit 14: Articles re Leaking Generators and Chemical Hazards of Benzene on the nearby public;

Exhibit 15: Article on the air pollution of generators entitled "How to Avoid the Exhaust Associated with Diesel Generators";

Exhibit 16: Article on benzene effect on children, as compared to adults;

Exhibit 17: Report on the chemical composition and effect of benzene;

Exhibit 18: EPA re: animal health as related to benzene;

Exhibit 19: County's Planning Code Section 303;

Exhibit 20: County's Planning Code section 101 and 101.1;

Exhibit 21: Introduction to the County's General Plan, as obtained from the County's website;

Exhibit 22: General Plan Up to Date, as obtained from the County's website;

Exhibit 23: Recreation and Open Space Element of the County's General Plan, as obtained from the County's website;

Exhibit 24: Safety and Resilience Element of the County's General Plan, as obtained from the County's website;

Exhibit 25: St. Nicholas Parish History.

EXHIBIT 1

San Francisco Planning
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
628.652.7600
www.sfplanning.org

CEQA Exemption Determination

PROPERTY INFORMATION/PROJECT DESCRIPTION

Project Address		Block/Lot(s)
350 AMBER DR		7521005
Case No.		**Permit No.**
2024-004318ENV		
■ **Addition/ Alteration**	☐ **Demolition (requires HRE for Category B Building)**	☐ **New Construction**

Project description for Planning Department approval.

A (N) AT&T UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF INSTALLING:
· INSTALLATION OF A 20'-0" X 27'-6" AT&T TELECOMMUNICATIONS FACILITY (~550 SQ. FT.)
· INSTALLATION OF A AT&T 103'-0" MONOPOLE
· INSTALLATION OF A AT&T 8' CHAIN LINK FENCE
· INSTALLATION OF (2) AT&T 6' WIDE AND (1) 4' WIDE CHAIN LINK GATES
· INSTALLATION OF AT&T ANTENNA MOUNTING ASSEMBLIES AT A 100'-0" CENTERLINE
· INSTALLATION OF (12) AT&T PANEL ANTENNAS MOUNTED AT A 100'-0" CENTERLINE ((4) PER SECTOR)
· INSTALLATION OF (9) AT&T REMOTE RADIO UNITS (RRUS) ((3) PER SECTOR)
· INSTALLATION OF (3) AT&T TOWER MOUNTED DC-9 SURGE SUPPRESSORS
· INSTALLATION OF (1) FIRSTNET BY AT&T GPS UNIT MOUNTED ON PROPOSED OUTDOOR EQUIPMENT CABINET
· INSTALLATION OF (1) WALK-UP CABINET (WUC) EQUIPMENT CABINET
· INSTALLATION OF A NEW AT&T 30KW DC GENERATOR WITH 190 GALLON DIESEL FUEL TANK ON A NEW 5'-0" X 9'-0" CONCRETE PAD

EXEMPTION TYPE

The project has been determined to be exempt under the California Environmental Quality Act (CEQA).

☐	**Class 1 - Existing Facilities.** **(CEQA Guidelines section 15301)** Interior and exterior alterations; additions under 10,000 sq. ft.
■	**Class 3 - New Construction.** **(CEQA Guidelines section 15303)** Up to three new single-family residences or six dwelling units in one building; commercial/office structures; utility extensions; change of use under 10,000 sq. ft. if principally permitted or with a CU.
☐	**Class 32 - In-Fill Development.** **(CEQA Guidelines section 15332)** New Construction of seven or more units or additions greater than 10,000 sq. ft. and meets the conditions described below: (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations. (b) The proposed development occurs within city limits on a project site of no more than 5 acres substantially surrounded by urban uses. (c) The project site has no value as habitat for endangered rare or threatened species. (d) Approval of the project would not result in any significant effects relating to traffic , noise, air quality, or water quality. (e) The site can be adequately served by all required utilities and public services.
☐	**Other** ____
☐	**Common Sense Exemption (CEQA Guidelines section 15061(b)(3)).** It can be seen with certainty that there is no possibility of a significant effect on the environment .

ENVIRONMENTAL SCREENING ASSESSMENT

Comments:
Planner Signature: Diane Livia

PROPERTY STATUS - HISTORIC RESOURCE

PROPERTY IS ONE OF THE FOLLOWING:	
☐	**Category A:** Known Historical Resource.
■	**Category B:** Potential Historical Resource (over 45 years of age).
☐	**Category C:** Not a Historical Resource or Not Age Eligible (under 45 years of age).

PROPOSED WORK CHECKLIST

Check all that apply to the project.	
☐	**Change of use and new construction.** Tenant improvements not included.
☐	**Regular maintenance or repair** to correct or repair deterioration, decay, or damage to building.
☐	**Garage work.** A new opening that meets the *Guidelines for Adding Garages and Curb Cuts*, or replacement of a garage door in an existing opening that meets the Residential Design Guidelines.
☐	**Deck, terrace construction, or fences** not visible from any immediately adjacent public right-of-way.
☐	**Mechanical equipment installation** that is not visible from any immediately adjacent public right-of-way.
☐	**Dormer installation** that meets the requirements for exemption from public notification under *Zoning Administrator Bulletin No. 3: Dormer Windows*.
☐	**Addition(s)** not visible from any immediately adjacent public right-of-way for 150 feet in each direction; or does not extend vertically beyond the floor level of the top story of the structure, or does not cause the removal of architectural significant roofing features.
☐	**Façade or storefront alterations** that do not remove, alter, or obscure character -defining features.
☐	**Restoration** based upon documented evidence of a building's historic condition, such as historic photographs, plans, physical evidence, or similar buildings.
Note: Project Planner must check box below before proceeding.	
■	Project is not listed.
☐	Project involves scope of work listed above.

ADVANCED HISTORICAL REVIEW

Check all that apply to the project.

☐ **Reclassification of property status**. *(Attach HRER Part I relevant analysis; requires Principal Preservation Planner approval)*

- ☐ Reclassify to Category A
- ☐ Reclassify to Category C
- ☐ Lacks Historic Integrity
- ☐ Lacks Historic Significance

☐ Project involves a **known historical resource (CEQA Category A)**

☐ Project does not substantially impact character-defining features of a historic resource (see Comments)

☐ Project is compatible, yet differentiated, with a historic resource.

☐ Project consistent with the Secretary of the Interior Standards for the Treatment of Historic Properties

Note: If ANY box above is checked, a Preservation Planner MUST sign below.

■ **Project can proceed with EXEMPTION REVIEW**. The project has been reviewed by the Preservation Planner and can proceed with exemption review.

Comments by Preservation Planner:
Project is the installation of poles, fencing and cabinet equipment located in the parking lot at some distance from existing buildings. Parking area configuration to remain the same and no change to buildings

Preservation Planner Signature: Elizabeth Gordon Jonckheer

EXEMPTION DETERMINATION

■ **No further environmental review is required. The project is exempt under CEQA. There are no unusual circumstances that would result in a reasonable possibility of a significant effect.**

Project Approval Action:	**Signature:**
Planning Commission Hearing	Diane Livia 05/29/2025

Supporting documents are available for review on the San Francisco Property Information Map, which can be accessed at https://sfplanninggis.org/pim/. Individual files can be viewed by clicking on the Planning Applications link, clicking the "More Details" link under the project's environmental record number (ENV) and then clicking on the "Related Documents" link.

Once signed and dated, this document constitutes an exemption pursuant to CEQA Guidelines and chapter 31 of the San Francisco Administrative Code. Per chapter 31, an appeal of an exemption determination to the Board of Supervisors shall be filed within 30 days after the approval action occurs at a noticed public hearing, or within 30 days after posting on the planning department's website (https://sfplanning.org/resource/ceqa-exemptions) a written decision or written notice of the approval action, if the approval is not made at a noticed public hearing.

EXHIBIT 2

November 24, 2025

To the San Francisco Board of Supervisors:

It has come to my attention that a 104-foot-tall tower with 21 antennas, adjacent to Glen Canyon Park, has been green-lighted by the Planning Commission with a Class 3 Exemption from CEQA.

This proposed structure does not qualify for the exemption and has the potential to harm the city and its residents in multiple ways. I strongly urge the Board of Supervisors to revoke this exemption for the following reasons.

First, official geological maps show that the structure would be built on unstable filled land that is subject to potential failure in a landslide caused by earthquake and/or soil saturated by rain and underground water. There is also the potential for high winds to topple the structure.

Failure of the structure, for whatever reason, could endanger dozens of children in the adjacent playground, as well as severely damaging nearby park, police, and residential buildings.

Second, construction of the tower could increase the likelihood of a landslide on the adjacent steep slope, which would move down the slope, destroying native plant and wildlife habitat, including rare riparian habitat on one of the city's only two remaining creeks, namely the perennial tributary of Islais Creek at the bottom of Glen Canyon. In addition, drilling 90 feet below the ground surface for the tower would sever tree roots, killing trees beyond the structure's footprint.

In the late 1800s, botanists recorded 766 native plant species in San Francisco – indicating extraordinary biodiversity for an area of only 49 square miles, but 257 of these species, approximately one-third of the total, have been extirpated from the city by urban development. Restoring any of these species is a win for biodiversity, but very few, less than 10, have been successfully restored anywhere in the city, including federal parklands. One of these is the Scarlet Monkeyflower, Mimulus cardinalis, aka Erythranthe cardinalis, which the San Francisco Recreation and Park Department's Natural Resources Division (NRD) has planted in a 40-yard-long portion of the creekbed that could be buried and destroyed by such a landslide. I have personally worked as a volunteer with the NRD and the California Native Plant Society to remove invasive non-native plants such as English ivy and restore additional native riparian plant species in this creekbed. This is the most ecologically sensitive part of Glen Canyon, which is one of 31 significant natural areas in San Francisco managed by NRD.

Third, the diesel backup generator for the tower, which would be tested monthly, would create particulate air pollution in the adjacent playground, Police Academy, and nearby shopping center, adversely affecting the health of children and elderly people who use the playground and shopping center. Its diesel fuel tank would add the hazards of diesel spills, fires and potentially catastrophic explosion. This should not be allowed in a location adjacent to natural lands, a playground and a residential area.

Fourth, this ugly, 21-antenna-topped tower would be an aesthetic blight on the surrounding neighborhood and Glen Canyon Park. Plus, San Francisco does not need another antenna tower, since it already has the gigantic Sutro Tower and other smaller towers, which can accommodate more antennas.

Sincerely,

David D. Schmidt, Environmental Historian and Naturalist
Author, San Francisco Bay Area: An Environmental History (Backcountry Press, 2025)
davidnaturesf@gmail.com
415-971-5201
342 Princeton St.
San Francisco, CA 94134

EXHIBIT 3

Select Language
Google Translate

Glen Canyon Park

Scope of Work



After completing extensive community outreach to determine the scope of improvements at Glen Canyon, the project to be funded by the 2008 Clean and Safe Neighborhood Parks Bond, Neighborhood Parks Project will focus on the following areas: a larger welcoming entry with a vehicular drop-off on Elk Street, a pedestrian path and landscaping, a new expanded children's playground, and new tennis courts. Additionally, there will be minor repairs to the Recreation Center and an exterior accessible restroom will be provided, and the building's heating system was renovated.

Recreation and Parks Department (RPD) partnered with the Trust for Public Land (TPL) to host a series of six community improvement workshops, which determined the project plan and the scope of work. TPL gifted the project improvement plan to the City in order to extend the funds that the City can spend on capital improvement. The Board of Supervisors accepted TPL's gifted services and the park improvement plan. RPD and Department of Public Works (DPW) staff have held the additional community meetings in the fall and winter of 2011 to complete the community process for the design for the improvements to be funded by the 2008 Clean and Safe Neighborhood Parks Bond.

Background



Glen Canyon Park is a 66.6-acre recreation area located off of Elk Street and O'Shaughessy Boulevards in the Glen Park District. Rich with a history that spans back to the 1850s, Glen Canyon Park has seen a myriad of uses ranging from Adolph Sutro's personal "Gum Tree Ranch"; to the Crocker Real Estate Company's mini-amusement park and picnic site; to an earthquake refugee camp. Not until 1992 did the park come into its current state as an official public recreation site operated and maintained by the San Francisco Recreation and Parks Department.

Today, the park is valued by local residents as a wild refuge in the City and it also offers local residents:

- A 17,600-foot recreation center, including a gymnasium, auditorium, and offices
- Hiking trails and open space

- A playground
- Two baseball fields
- Two tennis courts
- A two-story Silver Tree Day Camp building

The canyon itself, one of the City's "Significant Natural Resource Areas", has naturally forested slopes, native chert outcroppings, and wild flower growths including important native San Francisco speciesGoogle **Translate**

Park users take full advantage of the recreation and day camp center's various programs and classes, organized youth sports offerings, and the natural scenery of the grounds.

Get Out and Play!

Thanks for supporting park improvements in your San Francisco parks! To stay informed and involved, we encourage you to subscribe to Rec and Park eNews.

You can also explore Rec and Park volunteer opportunities – We have park needs in every corner of the city and volunteer opportunities that are as diverse as your interests, skills, and abilities. Have fun in your parks, and get out and play!

Documents & Materials

- Glen Canyon Park Park Map (PDF)
- Glen Canyon Tennis Court Relocation (PDF)
- Site Schematic Plan and Preferred Playground Design, 02-2012 (PDF)

Information Flyers

- Glen Canyon 11-12-2011 Community Meeting Flyer (PDF)
- Glen Canyon 12-10-2011 Community Meeting Flyer (PDF)
- Glen Canyon Community Meetings - Summer 2012 (JPG)
- Glen Canyon Park and Trail - Community Meetings Flyer (Spanish) (PDF)
- Glen Canyon Park and Trail - Community Meetings Flyer (Traditional Chinese) (PDF)
- Glen Canyon Park Park Improvement Plan (PDF)
- Glen Canyon Park Park Map (PDF)
- Glen Canyon Trail Meeting flyer (PDF)

Meeting Minutes

- Glen Canyon Community Meeting Presentation 12-10-2011 (PDF)
- Glen Canyon Kick-Off Meeting 12-16-2010 (PDF)
- Glen Canyon Park and Trail - Community Workshop Number 2 (PDF)
- Glen Canyon Park and Trail - Community Workshop Number 3 (PDF)
- Glen Canyon Park and Trail - Community Workshop Number 4 (PDF)
- Glen Canyon Park and Trail - Community Workshop Number 6 (PDF)
- Glen Canyon Park and Trail Community Workshop Number 7 (PDF)

Information & Publications

- Glen Canyon Project Information Flyer (PDF)
- Glen Park Access During Renovation (PDF)
- Project Update and Letter from Supervisor Wiener (PDF)

Existing Conditions Maps from Workshop 2

- Building and Site Facility Program (PDF)
- Circulation (PDF)
- Context (PDF)
- Management (PDF)
- Natural Resources (PDF)
- Sewer System and Hydrology (PDF)
- Site and Building History, Building Assessment, and Historic Current Use Plans (PDF)
- Visioning Worksheet (PDF)

Concept Plan Options Workshop 3

Google Translate

- Concept Plan Options (PDF)
- Presentation Describing Concept Plan Options (PDF)
- Summary of Comments - 3 Options for Glen Canyon Park (PDF)

Workshop 4

- Workshop Number 4 Draft Preferred Plan (PDF)
- Workshop Number 4 Presentation of Park Improvement Plan Preferred Option and Costs (PDF)

Workshop 5

- 05-05-2011 Character Exercise (PDF)
- 05-05-2011 Plan and Phasing Exercise Board 24 by 48 rev (PDF)
- Glen Canyon Park Final Revision (PDF)

Final Workshop Materials

- 06-09-2011 Final PowerPoint (PDF)
- 06-09-2011 Plan and Boards (PDF)
- 06-09-2011 Trails Plan (PDF)

Tree Removal & Replanting Information

- Glen Canyon Park Renovation Tree Management Presentation 01-07-2013 (PDF)
- Glen Canyon Park Tree Planting Plan (JPG)
- New Tree Planting Plan (PDF)
- Tree Assessment and Preservation Plan (PDF)
- Tree Planting and Removal Plan (PDF)

About Us

The San Francisco Recreation and Park Department currently manages more than 230 parks, playgrounds and open spaces throughout San Francisco, including two outside city limits—Sharp Park in Pacifica and Camp Mather in the High Sierras. The system includes full-complex recreation centers, swimming pools, golf courses, sports fields and numerous small-to-medium-sized clubhouses that offer a variety of sports- and arts-related recreation programs for people of all ages. Included in the Department's responsibilities are Golden Gate Park, Coit Tower, the Marina Yacht Harbor, the San Francisco Zoo and Lake Merced.

In 2017, San Francisco became the first city in the nation where all residents have access to a park within a 10-minute walk, a direct result of the Department's commitment to increasing and improving parkland in the city. Learn More

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Social Media

Twitter

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Podcast

eNews Signup

Contact Us

San Francisco
Recreation & Parks

McLaren Lodge-
Golden Gate Park

501 Stanyan Street

San Francisco, CA
94117

Phone: 415-831-2700

Recreation Program
Registration
(Translation Available):
(415) 831-6800

Email Us

EXHIBIT 4

COASTAL CONSERVANCY

Staff Recommendation
December 2, 2010

GLEN CANYON PARK MASTER PLAN

Project No. 10-039-01
Project Manager: Amy Hutzel

RECOMMENDED ACTION: Authorization to disburse up to $289,950 to the Trust for Public Land to develop a Master Plan for Glen Canyon Park, San Francisco, including a plan for the recreation area and a plan and design for enhancement of trails.

LOCATION: Glen Canyon Park, in the south central portion of the City and County of San Francisco (Exhibit 1).

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Location and Site Maps

Exhibit 2: Project Photos

Exhibit 3: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160 *et seq.* of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes disbursement of up to $289,950 (two hundred eight nine thousand nine hundred fifty dollars) to the Trust for Public Land ("TPL") to develop a Master Plan ("Master Plan") for the recreation area and trails in Glen Canyon Park, City and County of San Francisco. This authorization is subject to the following conditions:

1. Prior to the disbursement of funds, TPL shall submit for the review and approval of the Executive Officer of the Conservancy a final work program, schedule and budget; and the scopes of work and the roster of contractors to be employed in the project.
2. TPL shall develop the Master Plan in close consultation with the San Francisco Recreation and Park Department."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the current Project Selection Criteria and Guidelines.
2. The proposed authorization is consistent with the purposes and objectives of the San Francisco Bay Area Conservancy Program, Chapter 4.5 of Division 21 of the Public Resources Code regarding public access.
3. The Trust for Public Land is a non-profit organization existing under 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code."

PROJECT SUMMARY:

Staff recommends that the State Coastal Conservancy authorize disbursement of up to $289,950 to the Trust for Public Land ("TPL") to develop a Master Plan for Glen Canyon Park in San Francisco.

Glen Canyon Park (the "Park") is a 68.8 acre park located in the south central portion of San Francisco and managed by the San Francisco Recreation and Park Department ("RPD"). The Park consists of a highly used indoor and outdoor recreation area, which includes a Recreation Center with a gym, auditorium, bathrooms, and offices, as well as outdoor tennis courts, baseball/softball fields, a large sports meadow, several picnic area, and an outdoor playground. Beyond the active recreation area stretches 60 acres of riparian coastal scrub, grassland, and urban forest habitats, a mile of above ground creek, and over four miles of hiking trails.

Though heavily used, the Park is in critical need of attention and renovation. Islais Creek runs for one mile above ground and then underground in culverts; the playing fields located above the decaying wooden culverts experience shifting ground and irrigation issues. The Recreation Center was built in 1934 and is seismically unsafe, inaccessible to people with disabilities, has significant roof problems, and has a warped and sinking floor due to the underground creek that runs along one corner. The playground is also not accessible to people with disabilities and is constructed of treated wood which contains arsenic. Numerous social trails have developed over the years, creating erosion issues on the hillsides and impacting water quality in the creek. In addition, there is an ongoing effort to protect the native habitats in Glen Canyon, particularly the riparian habitats, from invasive plant species such as Cape ivy.

Recognizing the high level of public use and significant need for renovation, the City of San Francisco has committed city bond funds for improvements at Glen Canyon Park. RPD has $900,000 designated for trail construction and $5.8 million designated for construction of the recreation area from the 2008 Clean and Safe Neighborhood Park Bond (Proposition A). TPL will work closely with the RPD and the community to develop a viable Master Plan that holistically integrates the Park's historical recreational facility with its vast natural area. RPD will use the Master Plan to implement improvements at the Park. TPL's involvement and the proposed Conservancy grant will 1) enable the RPD bond funds to go farther and be used solely for final design and implementation, and 2) expedite the completion of the Master Plan in a cost effective manner while engaging the community. RPD will likely need to raise additional funds to implement all of the recommendations of the Master Plan and may return to the Conservancy with a grant proposal for implementation to supplement their bond funds.

TPL will conduct a two part planning process, the first focused on the recreation area and the second focused on the trails. Part I: The planning stage for the recreation area will entail data gathering, consultant team selection, facilitation of six planning workshops for community members and stakeholders, and preparation of a final community-supported Master Plan, with phasing and costs. The Master Plan will be used by RPD to conduct subsequent final design work for the renovation and construction phase. Part II: The planning effort for the trails will entail the above work as well as the design phase. Conservancy and matching funds will be used primarily to fund professional services consultants, including landscape architects, planners, and technical consultants (geotechnical engineers, structural engineers, surveyors, and arborists) as well as support for TPL's project staff, including a project manager and community outreach associate, and project expenses, such as postage, printing, and travel. The Master Plan will be completed by the end of 2011. The City of San Francisco will conduct environmental review under the California Environmental Quality Act ("CEQA") upon completion of the Master Plan, followed by final design of the recreation area and implementation of the trails and recreation area. RPD's goal is to complete the project by the end of 2013.

Since 1972, TPL has worked with willing landowners, community groups, and national, state, and local agencies to complete more than 3,000 land conservation projects in 46 states, and has a successful history of planning and revitalizing public urban parks in cities across the United States. TPL has a successful history of partnering with the RPD and also a successful history of working with the Conservancy. TPL has completed significant acquisitions in the San Francisco Bay Area and along the California Coast in partnership with the Conservancy.

Site Description: Glen Canyon Park has incredible, yet often under-recognized, historical, ecological, and recreational features.

This urban canyon offers 60 acres of biologically diverse urban wilderness with trails, educational displays, and vista points. Glen Canyon Park is one of San Francisco's 31 significant natural resource areas, with three native plant communities: riparian, grassland, and coastal scrub, as well as a 17-acre exotic forest of Eucalyptus trees near the entrance to the Park. The canyon is home to 170 species of native plants (including coyote brush, sticky monkey flower, coastal sage, and bee plant), 43 species of birds (such as white-crowned sparrow, black phoebe, red-tailed hawk, red-shouldered hawk, and great horned owl), and 30 species of butterflies. Other wildlife includes skunk, raccoon, coyote, western fence lizard, and meadow mouse.

The Park provides a glimpse into coastal California's geologic history for visitors. Ranging in elevation from 225 feet above sea level at the south end to 575 feet along the canyon's northern rim, the Park is characterized by layered chert outcroppings on the steep upper slopes and 100-200 million year old bedrock under the ravine-fill of the canyon's lower slope. The road cuts along O'Shaugnessy Boulevard at the Parks' western boundary show the dramatic geologic layering and folding and the trails through the park pass through and around numerous rock outcroppings.

Perhaps the canyon's most significant feature is a one-mile above-ground stretch of the north fork of Islais Creek, which flows year round and is one of a handful of above ground creek segments remaining in San Francisco. The creek is home to a lush riparian community of willow, sycamore, alder, currant, red columbine, seep monkey flower, lady fern, and horsetail. Juncos, hummingbirds, warblers, chickadees, and bushtits can be seen in the trees. The creek

provides habitat for adult and larval insects which provide food for resident and migrating birds as well as bats, dragonflies, amphibians, reptiles, and small mammals.

The active recreation area includes a 17,600 square foot Recreation Center built in 1934 with a gym, auditorium, offices, and bathrooms, as well as two outdoor tennis courts, two baseball/softball diamonds, a large sports meadow, and a fenced-in outdoor playground. Activities offered by the RPD at the Recreation Center include badminton, tennis, volleyball, basketball, and soccer, as well as art and music classes for youth. RPD offers scholarships for underserved youth to enroll in these classes. The park also hosts a two-story, 3,960 square foot daycare center built in the 1960s. The facility is leased to Glenridge Co-operative Nursery School during the school year and used by RPD for Silver Tree Summer Camp, which has been running summer youth activities in the Park for over 60 years.

The Park is located in Glen Park, a dense, urban neighborhood, and is surrounded by numerous schools, major roads, and a commercial area. The park is easily accessible by public transit, located within walking distance from the Glen Park BART Station and with a Muni bus stop located at the south entrance. The Park also offers the potential for regional trail connections. There are over 4 miles of trails within the Park, which can potentially link directly into the Twin Peaks trail networks to the north and thereby connect with the Bay Area Ridge Trail. Additionally, there are numerous opportunities to improve trail connections to nearby schools, playgrounds, and neighborhoods.

Project History: Once hunting territory for the Ohlone, the region of Glen Canyon Park has sustained centuries of transformation. After serving as grazing land for the Mission Dolores longhorn cattle and sheep in the early 19th century, the region was transfigured by the invasive but characteristic blue gum eucalyptus planted by mayor and one-time owner, Adolph Sutro. Purchased and revived in 1889 by the Crocker Real Estate Company as the Glen Park Picnic Grounds, the canyon housed an amusement park, aviary, and small zoo. This land of leisure and recreation soon became a site of survival when, in 1906, hundreds of San Francisco residents rendered homeless from the devastating earthquake and city-wide fires sought refuge in the canyon's emergency-rigged camps. In 1922, the City and County of San Francisco purchased the property for $30,000 for protection as an urban recreation area.

In 1941, O'Shaughnessy Boulevard was completed, cutting off the west side of the park and its watershed and diminishing Islais Creek, one of the few aboveground and free-flowing creeks in San Francisco. Since then, community organizations, such as the Friends of Glen Canyon Park and the Glen Park Association, have worked arduously to improve the park's recreational facilities and restore its natural areas. A 1970s plan to widen O'Shaughnessy Boulevard was defeated by the "Gum Tree ladies," a group of local women united around the efforts to save Glen Canyon from development.

In 2002, the RPD secured grant funding from the Conservancy to implement recommendations from Glen Park's Natural Resources Inventory and Master Plan. The Conservancy's $250,000 grant was matched by $250,000 from RPD and was used to improve a number of trails on the hillsides and reduce the social trail network, install erosion control features along sections of the hillside trails below O'Shaugnessy Boulevard, install interpretive signs, and restore native plant habitat along portions of Islais Creek. During the same time period, RPD held three community meetings, each drawing approximately 50-70 participants. These community planning meetings identified the need to rebuild or renovate the Recreation Center, and initiated a Park

Improvement Plan ("PIP") centered around four community-developed concepts: 1) Rebuilding, relocating, and/or expanding the Recreation Center with gym, auditorium, activity space, and environmental education center; 2) Revitalizing the Canyon into a "Living Classroom" offering a unique ecological experience combining recreation and education; 3) Expanding play and picnic areas, and upgrading courts and fields; and 4) Daylighting or resurfacing the below ground portions of Islais Creek.

The PIP, which had involved so much enthusiastic community commitment, was not able to be completed due to lack of funding. Fortunately, in 2008, Glen Canyon Park was included in the City of San Francisco's Clean and Safe Neighborhood Park Bond (Proposition A), which was passed by the voters. RPD has designated $900,000 of the bond funds towards trail work and $5.8 million towards the recreation area. With this proposed grant from the Conservancy, TPL proposes to build on Glen Canyon Park's 2003 PIP to initiate a fresh and comprehensive community planning and visioning approach, resulting in a fully supported and achievable Master Plan with clear steps of implementation and measurable outcomes.

PROJECT FINANCING

Coastal Conservancy	$289,950.00
TPL (Private Foundation and Corporate Grants)	$193,300.00
Total Project Costs	$483,250.00

Conservancy funds are anticipated to come from the "Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006" (Proposition 84). Proposition 84 funds may be used for the purposes of promoting access to and enjoyment of the urban open space resources in the nine-county San Francisco Bay Area in accordance with the provisions of the Conservancy's enabling legislation, Division 21 of the Public Resources Code. In addition, Proposition 84 funds may be utilized to finance planning necessary for the successful design, selection, and implementation of such projects. Consistent with the purposes of Proposition 84, the proposed project will be undertaken pursuant to the San Francisco Bay Area Conservancy Program (Chapter 4.5 of Division 21 of the Public Resources Code), and will consist of planning necessary to improve access to and visitor-serving amenities at Glen Canyon Park in the City and County of San Francisco.

TPL has raised $193,300 in funds from a variety of private sources to contribute towards the Master Plan. Conservancy and TPL-raised funds will be used for: 1) TPL project staff (project manager, community outreach associate, legal, marketing, and government affairs), 2) professional services (landscape architects, planners, and technical consultants), 3) TPL program support services, and 4) printing, postage, travel, and office expenses.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project is consistent with Chapter 4.5 of Division 21 of the Public Resources Code, sections 31160 *et seq.* regarding San Francisco Bay projects.

Pursuant to Section 31162, the Conservancy may award grants in the nine-county San Francisco Bay Area that help to achieve various specific goals, including the goals of improving public

access to urban open spaces, protecting natural habitats and open space resources of regional importance, and promoting projects that provide open space and natural areas accessible to urban populations for recreational purposes. The proposed project is located entirely within San Francisco County, one of the designated nine counties of the San Francisco Bay Area.

Consistent with Section 31162(a), the proposed project will produce a Master Plan for improved public access to urban open spaces. The proposed project will not have a significant adverse effect on environmentally sensitive areas or wildlife.

Consistent with Section 31162(b), the proposed project will plan for increased protection of natural habitats, scenic areas and open-space resources of regional importance in Glen Canyon Park.

Consistent with Section 31162(d), the proposed project will plan for enhancement of Glen Canyon Park, which is easily accessible of to urban populations for recreational and educational purposes.

In addition, the proposed project satisfies criteria for determining project priority under Section 31163(c), as follows: (1) the proposed project is supported by adopted local plans, including the RPD's Significant Natural Resource Areas Management Plan (2006), the San Francisco Planning Department's Glen Park Community Plan (in draft, not yet adopted), the San Francisco Stormwater Design Guidelines adopted by the San Francisco Public Utility Commission in 2010, and the San Francisco Climate Action Plan (2004), (2) the proposed project will serve a regional consistency (Glen Canyon Park is a heavily used park attracting visitors from multiple nearby neighborhoods and from throughout San Francisco); (3) the proposed project will be implemented in a timely way (the Master Plan will be completed within one year); (4), the proposed project provides opportunities for benefits that could be lost if the project is not quickly implemented, as there are City of San Francisco bond funds available for implementation that necessitate a Master Plan; and (5) the proposed project will include matching funds from other sources (TPL).

CONSISTENCY WITH CONSERVANCY'S 2007 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 10, Objective G** of the Conservancy's 2007 Strategic Plan, the proposed project will develop a plan for enhancement of one mile of riparian habitat along Islais Creek.

Consistent with **Goal 10, Objective I**, the proposed project will develop a plan to enhance watershed functions in Glen Canyon.

Consistent with **Goal 11, Objective A**, the proposed project will develop a plan to provide a recreational facility that includes picnic and staging areas, interpretive signs, and interpretive or educational centers.

Consistent with **Goal 11, Objective H**, the proposed project will develop a plan for regionally significant trails and community connectors.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on June 4, 2009, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The Glen Park Master plan effort is supported by many individuals and entities, including State Senator Mark Leno, Assemblyperson Tom Ammiano, San Francisco Supervisors Bevan Dufty and Sean Elsbernd, San Francisco Recreation and Park Department, and Friends of Glen Canyon Park (see Exhibit 3: Project Letters).
4. **Location:** The proposed project is located in the south central portion of San Francisco, within the nine-county Bay Area.
5. **Need:** Conservancy funds are needed to allow TPL to complete the Master Plan in a timely fashion with significant community involvement, allowing the RPD to proceed with implementation using their bond funds.
6. **Greater-than-local interest:** Glen Canyon Park is a large, heavily used park in San Francisco that provides a unique combination of significant active recreation at the entry to a 60 acre canyon that allows visitors to experience wildlife in the city. The canyon is home to a mile long stretch of above ground creek (one of a handful of remaining creeks in San Francisco), significant urban wildlife habitat (riparian, scrub, and grassland), and over four miles of hiking trails.
7. **Sea level rise vulnerability:** Glen Canyon Park is not located in an area vulnerable to future sea level rise.

Additional Criteria

8. **Urgency:** The Park is in urgent need of attention. The playing fields located above the decaying wooden culverts that carry the underground portion of Islais Creek experience shifting ground and irrigation issues. The Recreation Center was built in 1934 and is seismically unsafe, inaccessible to people with disabilities, has significant roof problems, and has a warped and sinking floor due to the underground creek that runs along one corner. The playground is also not accessible to people with disabilities and is constructed of treated wood which contains arsenic. Numerous social trails have developed over the years, creating erosion issues on the hillsides and impacting water quality in the creek. In addition, there is an ongoing effort to protect the native habitats in Glen Canyon, particularly the riparian habitats, from invasive plant species such as Cape ivy. The Master Plan will address these issues and allow for RPD to move forward with park improvements.

9. **Resolution of more than one issue**: TPL's is committed to creating a holistic Master Plan that considers the recreational, historical, and ecological aspects of the entire park. The Master Plan will strive to have the park's recreation area and associated facilities complement the extensive natural areas, with integration of the two areas as much as possible.
10. **Leverage**: See the "Project Financing" section above.
11. **Conflict resolution**: The Master Plan effort will need to address conflicting objectives by park users. The park is large and good design can assist with efforts to accommodate most uses, such as picnicking, dog walking, organized sports, hiking, and playground use by children.
13. **Readiness**: TPL has raised the remaining funds needed for the Master Plan and is ready to proceed and complete the Master Plan by the end of 2011. RPD has designated bond funds for implementation of the Master Plan and has a goal of completing the Glen Canyon Park work by end of 2013.
14. **Realization of prior Conservancy goals**: See "Project History" above.
16. **Cooperation**: The Master Plan process will engage numerous committees and commissions in San Francisco, as well as elected officials, nongovernmental organizations, and community groups, such as the Friends of Glen Canyon Park, the Glen Canyon Merchants Association, and California Native Plant Society. In addition, park users, such as Glenridge Co-operative Nursery School, recreational/sports organizations, and neighbors, will be invited to participate in the planning effort.
17. **Vulnerability from climate change impacts other than sea level rise:** As Glen Canyon Park is located in a coastal region, it is projected to have less severe temperature increases than inland regions. For this reason, Glen Canyon Park is an important refuge for human use and overall biodiversity. The Park also supports a critical watershed for the San Francisco area. Islais Creek is one of the few remaining spots in San Francisco providing fresh water, abundant insect life, and shelter for resident and migrating birds. The proposed project aims to protect and enhance important habitats and ecosystem processes of this urban open space. This is essential to minimizing threats from global warming to California's biodiversity. The recommendations for ecological improvements and protection that will result from TPL's proposed Master Planning Project for Glen Canyon Park will protect land for supporting native species in responding to climate change. The Master Plan will identify and provide recommendations for management of invasive species in order to reduce the impacts of this major stressor on biodiversity and restoration and enhancement of a riparian corridor in an urban coastal watershed area to protect biodiversity.
18. **Minimization of greenhouse gas emissions:** The restoration of an open space within an urban area will help support regional efforts to encourage transit-oriented, high-density development and reduce vehicle miles traveled and greenhouse gas emissions from transportation. Local trail enhancements through the park that provide pleasant, safe, and walkable connections to other neighborhoods may alleviate the need for local vehicle trips. Trail and recreation center design will include measures to avoid or minimize greenhouse gas emissions to the extent feasible and consistent with the project objectives.

COMPLIANCE WITH CEQA

The proposed master planning project is statutorily and categorically exempt from the provisions of the California Environmental Quality Act (CEQA) under two sections of 14 Cal. Code of Regulations. The proposed master planning activities are statutorily exempt pursuant to Section 15262 in that they will involve feasibility and planning analysis for possible future action that has not yet been adopted, approved or funded and they will include consideration of environmental factors. The master planning activities are likewise categorically exempt under §15306 to the extent that they involve basic data collection and resource evaluation activities. Staff will file a Notice of Exemption upon approval of the project.

EXHIBIT 5

Mount Sutro Forest That Was
Remembering the forest

Glen Canyon Park: Birds, Habitat, and the Significant Natural Resource Areas Management Program (SNRAMP)

Posted on November 16, 2011 by webmaster

Recently, we attended a meeting where we were given a beautiful pamphlet regarding the *Feathered Friends of Glen Canyon Park*. It pictured 45 species of birds that have been sighted in the park (including flyovers). And it said:

*"**Willows that line the creek** host nesting chickadees, warblers, woodpeckers and sparrows; they also offer food and shelter for other animals. Native trees like hillside oaks support many species passing through in spring and fall. **Non-native eucalyptus trees** have hosted nesting Great Horned Owls and Red-tailed Hawks for may years, while migrant tanagers, orioles, and warblers sing from their highest reaches every spring."*



photo credit: Janet Kessler



It was doubly ironic, then, that habitat destruction seems to be the plan for Glen Canyon Park. Only a few days earlier, The SNRAMP's contractors were using chainsaws and work-crews to hack through the habitat that has been so useful to birds and coyotes and other creatures that live in Glen Canyon Park.

Said an observer who sent us the pictures below:

"Yesterday volunteers were "building and expanding a butterfly habitat" — **more of the willows are down**. They told me: "there are other willows the coyotes can use." What they don't seem to understand is that the coyotes and raccoons and birds need not just *some willows*, but entire thickets where they can hide."



"… NAP people are in the thicket in the very back part of the park which no one uses — it has been a dense and impenetrable thicket for decades. Six of them with big gas-run chain saws are sawing through that growth "creating a buffer so that they can take out the 'invasive' ivy so that "native plants can grow." Again, this is our wildlife habitat. **There goes another section of our wilderness**."



The plan seems to be to **destroy habitat that wildlife is already using**, in an attempt to create a different habitat for wildlife that isn't there.

In this case, the NAP had contracted Shelterbelt Builders (which also does a lot of the pesticide application for SF Rec and Park) to chainsaw out the habitat.

Our tax dollars at work.



This entry was posted in Environment, nativism, Natural areas Program and tagged birds, Glen Canyon, habitat, habitat destruction, san francisco. Bookmark the permalink.

1 Response to *Glen Canyon Park: Birds, Habitat, and the Significant Natural Resource Areas Management Program (SNRAMP)*

Dolan Eargle *says:*

December 10, 2011 at 1:21 pm

I am generally against wholesale removal of a habitat that has arisen where none or little existed before. Too often the "purists" among us overlook any value that the existing habitat may have with its newer inhabitants. It is not always good to create a habitat without acknowledging the present situation.

Mount Sutro Forest That Was

Blog at WordPress.com.

EXHIBIT 6

Electromagnetic Radiation Safety

Scientific & policy developments regarding the biological & health effects of electromagnetic radiation
cell phones, cell towers, Wi-Fi, Smart Meters, electric vehicles & other wireless technology, including 5
Website curated by Joel Moskowitz, Ph.D., School of Public Health, University of California, Berkeley.

Monday, March 3, 2025

Effects of Wireless Radiation on Birds and Other Wildlife

**Honeybees and colony collapse disorder:
understanding key drivers and economic implications**

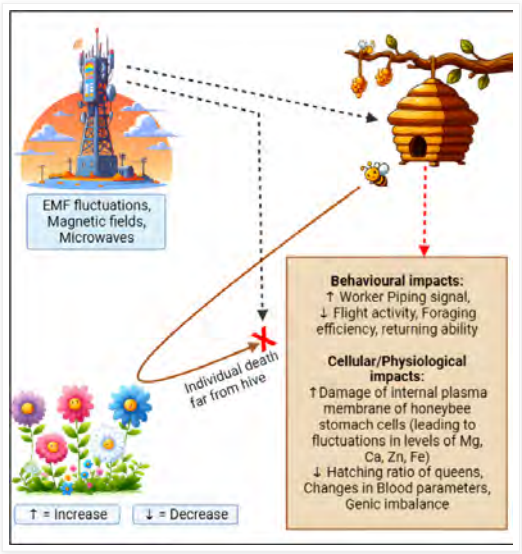


Fig. 3 Effects of electromagnetic fields on Honeybee health: EMF exposure is proposed to induce both behavioural changes (reduced foraging, increased distress signals, and impaired navigation) and cellular/physiological effects (membrane damage, mineral imbalances, reproductive impairment, stress markers, and genic imbalances). These changes can lead to individual bee death and potentially disrupt colony dynamics and survival, which can ultimately boost the process of colony collapse disorder Full size image

Singh G, Rana A. Honeybees and colony collapse disorder: understanding key drivers and economic implications. *Proc. Indian Natl. Sci. Acad.* (2025). https://doi.org/10.1007/s43538-025-00399-x

Abstract

Biodiversity, including the diversity of pollinators such as honeybees, is crucial for ecosystem stability and sustainable development. This review highlights the complex factors contributing to Colony Collapse Disorder (CCD), focusing on inadequate bee management practices, pesticide exposure, biotic stressors, nutritional deficiencies, electromagnetic fields, and climate change. These stressors are shown to interact in ways that impair honeybee health and behavior, leading to colony declines. The paper details the biological consequences of CCD, including the absence of adult worker bees, the persistence of the queen, and the lack of dead bees within the hive. The economic impact of declining honeybee populations is significant, with losses affecting crop yields, food prices, and global trade. This decline threatens agriculture, particularly in regions dependent on pollination services. The review emphasizes the interconnectedness of honeybee health with broader ecological and economic systems, calling for urgent conservation measures, improved management practices, and sustainable agricultural strategies to mitigate the negative effects of CCD. Key recommendations for future research focus on the need for regional studies, long-term monitoring, and public education on the importance of honeybee conservation.

Electromagnetic fields and bee disappearance

One intriguing theory posits that the proliferation of telecommunications technology and the increasing prevalence of electromagnetic fields (EMFs) may play a role in CCD (Fig. 3) (Wyszkowska et al. 2019; Sahib 2011; Hill & Bartomeus 2016). Adult honeybees possess a magnetoreception sense akin to other animals, including birds, microbes, fishes, whales, dolphins, and insects. Like other organisms such as birds, microbes, fishes, whales, dolphins, and insects, adult honeybees are equipped with an impressive magnetoreception sense. This sense aids in navigation during migrations and long-distance travel (Ferrari 2014). It is postulated that magnetic fields, electromagnetic field fluctuations, and geomagnetic disturbances disrupt bees' navigation systems, preventing their return to their hives (Ferrari 2014). In CCD the vanished bees never recover but are believed to die individually, far from their hives (Sahib 2011). Honeybees are known to detect Earth's magnetic field, possibly



Joel M. Moskowitz, Ph.D.
School of Public Health
University of California, Berkeley

Key Posts

- Welcome to EMR Safety
- Overview of Contents
- Latest News
- Featured News Stories
- Thirty Years of EMF Effects Research (Henry Lai c
- Tips to Reduce Your Wireless Radiation Exposure

Archive

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  - Effects of Wireless Radiation on Birds and Othe
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▶ 2015 (23)
▶ 2014 (10)
▶ 2013 (40)

using organized magnetic nanoparticles within their bodies (Liang et al. 2016; Lambinet et al. 2017). Thielens et al. conducted a study on the effects of radio-frequency electromagnetic fields (RF-EMFs) on Western honeybees (Thielens et al. 2020). Their study suggested that a modest transition in environmental incident power density, moving from frequencies below 3 GHz to higher frequencies, resulted in a notable rise in absorbed power. Active mobile phone handsets were found to have a profound impact on bee behaviour, inducing worker piping signals. Subsequent experiments confirmed these initial observations with controlled RF-EMF signal enhancements (Favre 2017). Mall and Kumar (2014) reported that radiofrequency and electromagnetic radiations can negatively impact biomolecular cells, ultimately impairing the biological structure and functions of organisms. Honeybees possess magnetic crystals in their fat bodies, and the effect of cell phone tower electromagnetic radiation on the foraging behaviour of Asiatic honeybees was observed (Taye et al. 2017). Observations included changes in returning ability, flight activity, and pollen foraging efficiency. Results revealed that colonies close to mobile phone towers were most affected, with flight activity and returning ability decreasing as proximity to the towers increased. RF-EMF from wireless devices and cell towers can cause changes in neurotransmitter functions, blood–brain barrier, morphology, calcium efflux, electrophysiology, cellular metabolism, and gene and protein expression in certain types of cells, even at low intensities (Sivani & Sudarsanam 2012). Exposure to mobile phone radiation has been shown to cause decay and damage to the internal plasma membranes of honeybee stomach cells, which in turn affect the levels of Mg, Ca, Zn, and Fe elements in the cells (Mahmoud & Gabarty 2021). Mobile phone radiation has been found to significantly reduce the hatching ratio of honeybee queens, but it did not adversely affect mating success. However, surviving queens were not negatively impacted after the exposure (Odemer & Odemer 2019).

Microwave radiation from mobile phones has been shown to cause adverse effects on different cell functions, including histological alterations in various visceral organs and changes in blood parameters in mice models (Yousif Al-Fatlawi 2022). Although Pollen foraging behavior did not show any significant difference, these findings underscore the potential harm of cell phone radiation on honeybee populations, which could have far-reaching consequences for ecosystems.

https://link.springer.com/article/10.1007/s43538-025-00399-x#Sec5

pdf: https://link.springer.com/content/pdf/10.1007/s43538-025-00399-x.pdf
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Electromagnetic radiation as an emerging driver factor for the decline of insects

Alfonso Balmori. Electromagnetic radiation as an emerging driver factor for the decline of insects. Sci Total Environ. 767:144913. https://doi.org/10.1016/j.scitotenv.2020.144913.

Highlights

• Biodiversity of insects is threatened worldwide
• This reductions is mainly attributed to agricultural practice and pesticide use
• There is sufficient evidence on the damage caused by electromagnetic radiation
• Electromagnetic radiation may be a complementary driver in this decline
• The precautionary principle should be applied before any new deployment (e.g. 5G)

Abstract

The biodiversity of insects is threatened worldwide. Numerous studies have reported the serious decline in insects that has occurred in recent decades. The same is happening with the important group of pollinators, with an essential utility for pollination of crops. Loss of insect diversity and abundance is expected to provoke cascading effects on food webs and ecosystem services. Many authors point out that reductions in insect abundance must be attributed mainly to agricultural practices and pesticide use. On the other hand, evidence for the effects of non-thermal microwave radiation on insects has been known for at least 50 years. The review carried out in this study shows that electromagnetic radiation should be considered seriously as a complementary driver for the dramatic decline in insects, acting in synergy with agricultural intensification, pesticides, invasive species and climate change. The extent that anthropogenic electromagnetic radiation represents a significant threat to insect pollinators is unresolved and plausible. For these reasons, and taking into account the benefits they provide to nature and humankind, the precautionary principle should be applied before any new deployment (such 5G) is considered.

Excerpt

The precautionary principle and the importance of seriously considering EMR as a factor of insect decline

Despite the strong scientific evidence of the negative impacts of electromagnetic radiation on insects, a recent study funded by the European Union's Horizon 2020 Research and Innovation Programme (EKLIPSE) stated that our current knowledge concerning the impact of anthropogenic RF-EMR on pollinators (and other invertebrates) is inconclusive (Vanbergen et al., 2019). Thus, the extent to which anthropogenic EMR represents a significant threat to insect pollinators is unresolved. For these reasons, and taking into account the benefits they provide to nature and humankind, the precautionary principle of the European Union (Communication from the Commission on the Precautionary Principle, 2000) should be applied.

The potential effects of RF-EMFs on most taxonomic groups, including migratory birds, bats and insects, are largely unknown, and the potential effects on wildlife could become more relevant with the expected adoption of new mobile network technology (5G), raising the possibility of unintended biological consequences (Sutherland et al., 2018). Thus, before any new deployment (such 5G) is considered, its effects should be clearly assessed, at least while conclusions are drawn and these existing uncertainties are overcome, according to the official document 'Late Lessons of EarlyWarnings' (European Environment Agency, 2013).

A letter by the United States Department of the Interior sent to the National Telecommunications and Information Administration in the Department of Commerce warns about the scarcity of studies carried out on the impacts from non-ionising EMR emitted by communication towers (United States Department of the Interior, 2014). The precise potential effects of increases in EMR on wildlife, which are not yet well recognised by the global conservation community, have been identified as an important emerging issue for global conservation and biological diversity (Sutherland et al., 2018). Thus, aswe have

explained in this review, EMR should be seriously considered as a complementary driver for the dramatic decline in insects in recent studies, acting in synergy with agricultural intensification, pesticides, invasive species and climate change.

https://www.sciencedirect.com/science/article/abs/pii/S0048969720384461

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Review. The influence of bioactive mobile telephony radiation at the level of a plant community – Possible mechanisms and indicators of the effects

Czerwiński M, Januszkiewicz L, Vian A, Lázaro A. Review. The influence of bioactive mobile telephony radiation at the level of a plant community – Possible mechanisms and indicators of the effects. Ecological Indicators. 108, January 2020, 105683. https://doi.org/10.1016/j.ecolind.2019.105683.

Highlights

• There are various indicators of microwave radiation impact on herbaceous vegetation.
• The best indicators are some parameters of vegetation canopy or individual plants.
• Specific plant functional groups may be indicators of long-term community processes.
• Other organisms interacting with plants, e.g. pollinators, should also be cons idered.
• The selection of indicators depends on the propagation of radiation in the canopy.

Abstract

Environmental exposure to radiofrequency electromagnetic fields (RF-EMFs) from mobile telephony has rapidly increased in the last two decades and this trend is expected to continue. The effects of this exposure at plant community level are unknown and difficult to assess in a scientifically appropriate manner. Such an assessment can be scientifically adequate if a studied plant community is completely new and control-impact radiation treatment is used.

In this review we aimed to predict ecological effects and identify indicators of the impact of bioactive RF-EMFs at the mobile telephony frequency range on plant communities. We considered the scenario where a plant community was exposed to radiation generated by a base transmitting station antenna mounted on a nearby mast. This plant community can be represented by mesic meadow, ruderal or arable weed community, or other herbaceous, moderately productive vegetation type. We concentrated primarily on radiation effects that can be recorded for a year since the exposure started. To predict them we used physical theories of radiowave propagation in vegetation and the knowledge on plants physiological responses to RF-EMF. Our indicators can be used for the detection of the impact of RF-EMFs on vegetation in a control-impact experiment.

The identified indicators can be classified into the following groups: (1) canopy parameters; (2) plant characteristics to be measured in the field or laboratory in a number of individuals that represent the populations of selected species; (3) community weighted means/medians (CWMs) of plant traits and strategies; (4) the abundance of other organisms that interact with plants and can influence their fitness or population size. The group of canopy parameters includes mean height, vertical vegetation structure and dry weight of above-ground standing phytomass. Plant characteristics requiring biometric sampling in the field are plant height, the number of fruits and seeds, as well as seed viability. The group of plant traits that are calculated as CWMs covers seed releasing height, seed dispersal mode, SLA, leaf orientation, month of germination and flowering, Ellenberg's light indicator value, and the proportion of individuals in the classes of competitors and stress tolerators according to Grime's CSR strategy scheme. The group of "non-plant" indicators includes primarily the frequency of flower visits by beetles, wasps, hoverflies, and bees that have their nests over ground. To detect ecological responses that occur for the first year since a herbaceous community has been exposed to potentially bioactive RF-EMF, the first two indicators groups should be used.

https://www.sciencedirect.com/science/article/pii/S1470160X19306764?via%3Dihub

Aug 1, 2019 (Updated Nov 1, 2019)

Selected Studies that Reported Adverse Effects of Electromagnetic Field (EMF) Exposure on Plants, Animals and Insects

Excerpted from a **letter to the United Nations Environmental Programme**
written by the Advisors to the **International EMF Scientist Appeal**, June 25, 2019

EMF exposure studies have found ...

in plants reduced growth, increased infection and physiological and morphological changes (Balodis et al. 1996, Haggerty 2010, Waldmann-Selsam et al. 2016, Havas and Symington 2016, Vian et al. 2016, Halgamuge 2017);

in birds, aggressive behavior, impaired reproduction and interference with migration (Southern 1975, Larkin and Sutherland 1977, Balmori 2004, Balmori and Hallberg 2007, Everaert and Bauwens 2007, Fernie et al. 2010, Engels et al. 2015, Wiltschko et al. 2015);

in livestock, especially dairy cows, reduced productivity, impaired reproduction, and sudden death (Burchard et al. 1996, Loscher and Kas 1998, Hillman et al. 2013, Stetzer et al. 2016);

in rodents, increased cancer risk in three long-term studies (Chou et al 1992, NTP 2018, Falcioni et al. 2019);

in amphibians (Balmori 2006, Balmori 2010) and insects (Cucurachi et al. 2013), deformities and population decline; and

in honey bees, aggressive behavior, reduced learning, reduced productivity, swarming and abandoning hives (Harst et al. 2006, Pattezhy 2009, Warnke 2009, Favre 2011, Kumar et al. 2011, Sahib 2011, Shepherd et al. 2019).

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Increased aggression and reduced aversive learning in honey bees exposed to extremely low frequency electromagnetic fields

Shepherd S, Hollands G, Godley VC, Sharkh SM, Jackson CW, Newland PL. Increased aggression and reduced aversive learning in honey bees exposed to extremely low frequency electromagnetic fields. PLoS One. 2019 Oct 10;14(10):e0223614. doi: 10.1371/journal.pone.0223614.

Abstract

Honey bees, Apis mellifera, are a globally significant pollinator species and are currently in decline, with losses attributed to an array of interacting environmental stressors. Extremely low frequency electromagnetic fields (ELF EMFs) are a lesser-known abiotic environmental factor that are emitted from a variety of anthropogenic sources, including power lines, and have recently been shown to have a significant impact on the cognitive abilities and behaviour of honey bees. Here we have investigated the effects of field-realistic levels of ELF EMFs on aversive learning and aggression levels, which are critical factors for bees to maintain colony strength. Bees were exposed for 17 h to 100 μT or 1000 μT ELF EMFs, or a sham control. A sting extension response (SER) assay was conducted to determine the effects of ELF EMFs on aversive learning, while an intruder assay was conducted to determine the effects of ELF EMFs on aggression levels. Exposure to both 100 μT and 1000 μT ELF EMF reduced aversive learning performance by over 20%. Exposure to 100 μT ELF EMFs also increased aggression scores by 60%, in response to intruder bees from foreign hives. These results indicate that short-term exposure to ELF EMFs, at levels that could be encountered in bee hives placed under power lines, reduced aversive learning and increased aggression levels. These behavioural changes could have wider ecological implications in terms of the ability of bees to interact with, and respond appropriately to, threats and negative environmental stimuli.

Open access paper: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0223614

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April 17, 2019

Letter to the National Park Service from the Environmental Health Trust

This thirteen page letter to the National Park Service from the Environmental Health Trust, dated April 10, 2019, summarizes the scientific basis for major health and environmental concerns about a proposal to install wireless telecom facilities in Grand Teton National Park.

The letter summarizes research on harm to the environment and wildlife from wireless radiation exposure. Furthermore, it addresses the following topics: (1) research on harm to humans; (2) rapid increase in wireless radiation exposure; (3) inadequacy of the Federal Communications Commission's exposure limits to protect humans; (4) greater susceptibility of children; (5) recent appeals from hundreds of experts to reduce exposure limits; and (6) other cell tower safety hazards.

This well-documented letter (81 references) can be downloaded from the following link:

https://ehtrust.org/grand-tetons-largest-cell-tower-expansion-in-national-park-history-letter-on-environmental-impact/.

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July 18, 2016

A Briefing Memo by Dr. Albert Manville

Albert M. Manville, II, Ph.D. A Briefing Memorandum: What We Know, Can Infer, and Don't Yet Know about Impacts from Thermal and Non-thermal Non-ionizing Radiation to Birds and Other Wildlife — for Public Release. July 14, 2016.

In this memo, Dr. Manville reviews the scientific literature that examines the impacts on wildlife from exposure to radio frequency radiation.

He observes that although the FCC has standards to protect humans from the heating (i.e., thermal) effects of wireless radiation exposure from cellular and broadcast towers, no standards exist to protect wildlife from thermal or non-thermal effects:

> "The radiation effects on wildlife need to be addressed by the Federal Communications Commission (FCC), the Environmental Protection Agency (EPA), the Department of Commerce, the U.S. Fish and Wildlife Service (FWS) and other governmental entities."

Dr. Manville concludes with the following statement:

> "In summary, we need to better understand … how to address these growing and poorly understood radiation impacts to migratory birds, bees, bats, and myriad other wildlife. At present, given industry and agency intransigence … massive amounts of money being spent to prevent addressing impacts from non-thermal radiation — not unlike the battles over tobacco and smoking — and a lack of significant, dedicated and reliable funding to advance independent field studies, … we are left with few options. Currently, other than to proceed using the precautionary approach and keep emissions as low as reasonably achievable, we are at loggerheads in advancing meaningful guidelines, policies and regulations that address non-thermal effects...."

Dr. Manville recommends that the U.S. adopt the following recommendations because federally-protected wildlife species are currently in danger from RFR exposure:

> "We desperately need to conduct field research on thermal and non-thermal radiation impacts to wild migratory birds and other wildlife here in North America, similar to studies conducted in Europe…."
>
> "Studies need to be designed to better tease out and understand causality of thermal and non-thermal impacts from radiation on migratory birds…. efforts need to be made to begin developing exposure guidelines for migratory birds and other wildlife …"
>
> "To minimize deleterious radiation exposures, these guidelines should include use of avoidance measures such as those developed by the electric utility industry for bird collision and electrocution avoidance …"
>
> "Studies need to be conducted on the use of "faux" branches (i.e., metal arms that mimic pine or fir branches) on cell and/or FM towers intended to disguise the towers as trees, but provide nesting and roosting opportunities for migratory birds including Bald Eagles, which will almost certainly be impacted both by thermal and non-thermal radiation effects."
>
> "Agencies tasked with the protection, management, and research on migratory birds and other wildlife … need to develop radiation policies that avoid or minimize impacts to migratory birds and other trust wildlife species."
>
> "As Levitt and Lai (2010) concluded, we do not actually need to know whether RFR effects are thermal or non-thermal to set exposure guidelines. Most scientists consider non-thermal effects as well established, even though the implications are not fully understood."
>
> "Given the rapidly growing database of peer-reviewed, published scientific studies (e.g., http://www.saferemr.com, School of Public Health, University of California, Berkeley), it is time that FCC considers thermal and non-thermal effects from EMR in their tower permitting, and incorporates changes into their rulemaking regarding 'effects of communication towers on migratory birds.'"

Dr. Albert Manville II is an adjunct faculty member at Johns Hopkins University. He served as a senior wildlife biologist with the U.S. Fish and Wildlife Service from 1997 to 2014. He chaired the Communication Tower Working Group, partnering with the communications industry, federal and state agencies, researchers, and non-profit organizations. He testified more than 40 times before Congress and other governmental bodies and published more 170 papers. For more information, see http://advanced.jhu.edu/about-us/faculty/albert-manville/.

Dr. Manville's memo is available at http://bit.ly/Manvillewildlife.

Also see:

Cell Tower Radiation Affects Wildlife: Dept. of Interior Attacks FCC

Cell Tower Health Effects

Labels: albert manville, birds, broadcast towers, cell towers, eagles, EMF, FCC standards, honey bees, insects, Manville, protected species, radio frequency, wildlife

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EXHIBIT 7B

PUBLIC HEALTH WATCH

TOXIC TEXAS AIR

Levels of Cancer-Causing Benzene Reached New Heights in Beleaguered Channelview, Texas. Regulators Never Told Residents.

The highest levels exceed even Texas' benzene guideline — the weakest in the nation — but aren't being recorded by a state monitor. That means the community's cancer risk could be higher than previously thought.

by **Savanna Strott**
December 12, 2024



The Texas Commission on Environmental Quality has recorded high benzene emissions for nearly 20 years outside K-Solv, a barge-cleaning and chemical distribution facility in the southeastern corner of Channelview, Texas. Credit: Jeffersonn Castellanos/Univision45

Dangerously high levels of the cancer-causing chemical benzene continue to plague Channelview, Texas, despite warnings from state regulators that began almost 20 years ago.

Data collected during the state's most recent air monitoring trips include one benzene reading that was three times the Texas hourly guideline, the weakest in the nation. In two instances, benzene fumes were so strong that scientists with the Texas Commission on Environmental Quality, or TCEQ, experienced headaches and had to leave the area.

The scientists visited Channelview, an unincorporated community east of Houston, in 2021 and 2022, but the TCEQ didn't finalize its reports on the findings until this year. Public Health Watch obtained them through open records requests.

Nearly half of the one-hour averages the TCEQ's mobile monitoring team recorded exceeded what California says is safe. Three were at least 20 times higher than California allows.

The readings also exceeded what is considered safe by the city of Houston, which created its own benzene guidelines in 2020. If the levels found in Channelview had been recorded there, residents would have received one evacuation order, eight shelter-in-place orders and eight alerts.

Channelview residents received no notifications.

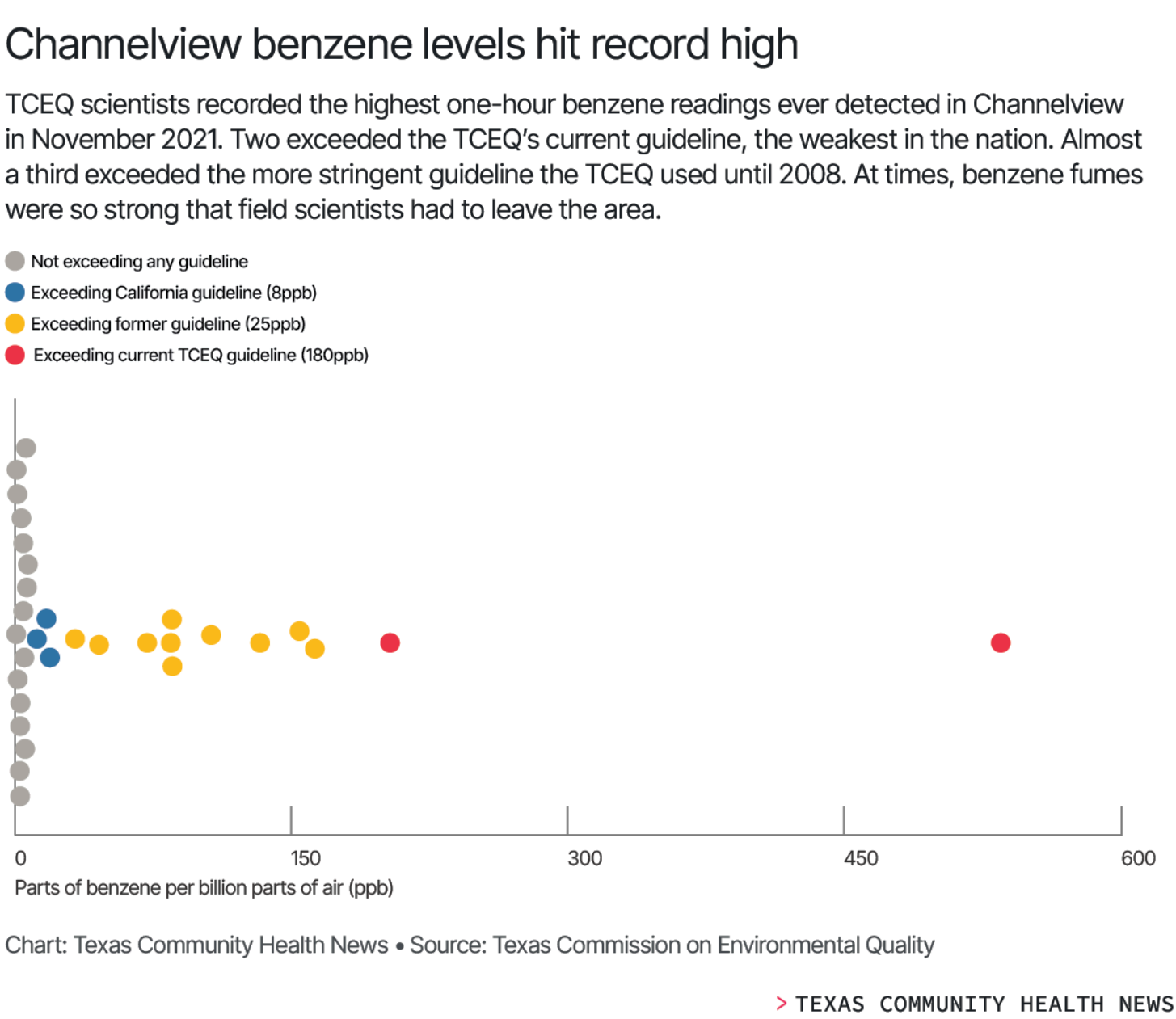
Short encounters with high levels of benzene can cause drowsiness, dizziness and unconsciousness, while chronic exposure has long been linked to leukemia and other blood cancers. Recent studies also link the chemical to diabetes and reproductive problems.

> ***"I definitely wouldn't want to be the person exposed to this."***
>
> — LOREN HOPKINS, ENVIRONMENTAL SCIENCE EXPERT AND RICE UNIVERSITY PROFESSOR

A TCEQ spokesperson said the Texas guidelines are “well below” the level where the state has determined health effects occur. Those guidelines are based on a handful of scientific studies from the 1980s and 1990s. The more stringent Houston guidelines are based on a **peer-reviewed paper** that evaluated 20 studies published between 2009 and 2019.

The TCEQ spokesperson said the agency has reviewed the science supporting benzene guidelines used by other institutions, but none of it has “warranted a reevaluation of TCEQ’s” guidelines.

“Just because a scientific study is more recent does not make it the best scientific evidence,” the spokesperson said.



The spikes the TCEQ monitoring team found in 2021 and 2022 are especially alarming because they weren't recorded by the state's closest stationary monitor, whose annual readings are used to gauge residents' cancer risk. Public Health Watch discovered the discrepancy when it compared hourly readings collected by the field scientists with hourly readings from the stationary monitor.

Loren Hopkins, a nationally recognized expert in environmental science and a professor at Rice University, used data from the stationary monitor to calculate the total lifetime cancer risk from chemical exposure for residents of south Channelview. She said they face a risk as high as 78 cases in 1 million people — more than double the state and national average of 30 in 1 million.

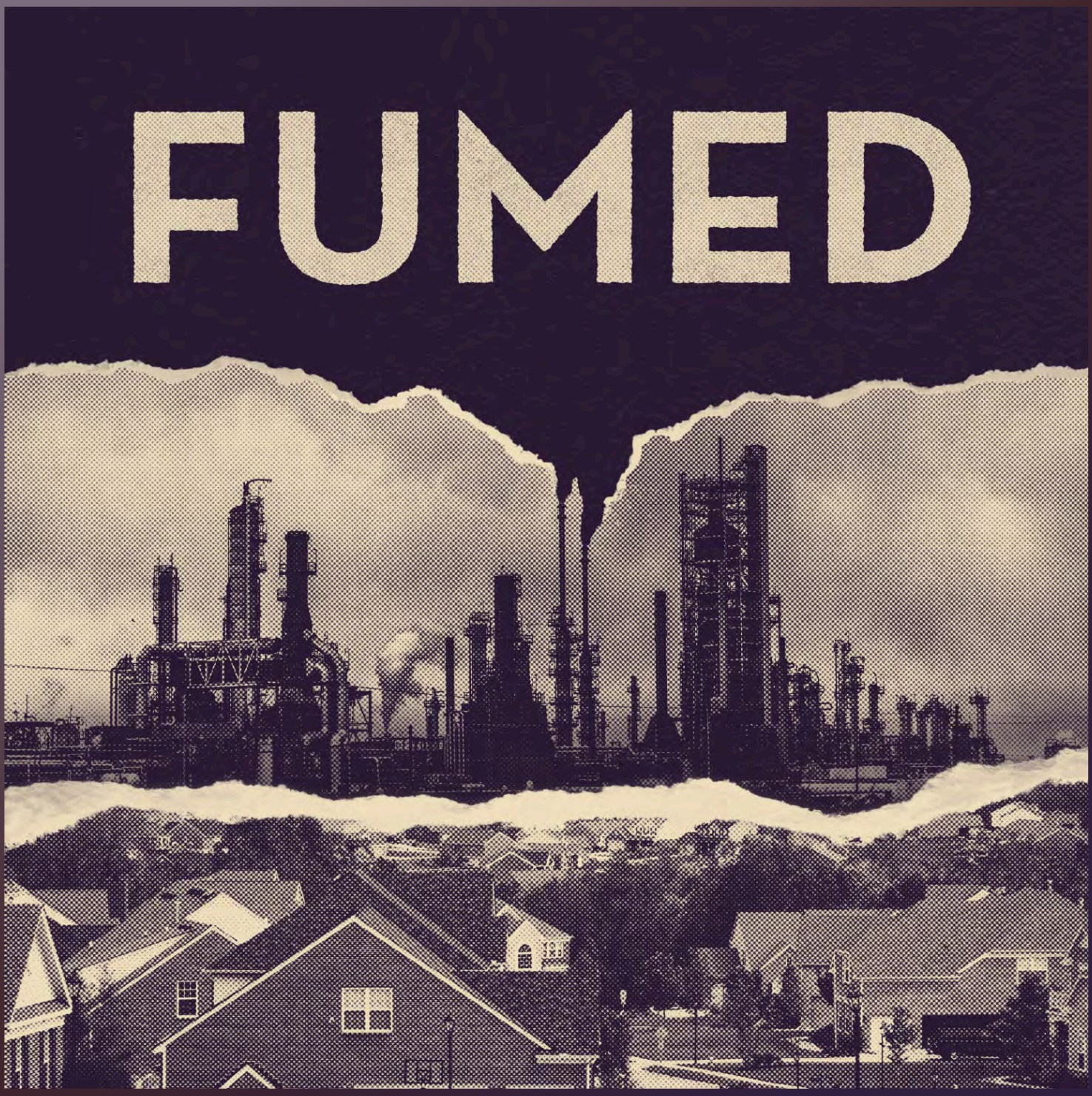
The risk would be much higher, Hopkins said, if the monitor isn't capturing benzene emissions from Channelview's southeastern corner, as Public Health Watch's analysis suggests.

Hopkins, who co-authored the paper that helped shape Houston's guidelines, said Channelview's benzene levels are "unacceptably high."

"I definitely wouldn't want to be the person exposed to this," she said.

Yvette Arellano, founder of the Houston-based environmental justice group Fenceline Watch, wasn't surprised that Channelview residents weren't notified about the high concentrations — or that the TCEQ's monitor isn't positioned to capture emissions from an area with a history of benzene pollution.

"Folks who live in communities throughout the [Houston] Ship Channel know this isn't new news," said Arellano, whose group advocates for people who live near polluting industries. "Is it right? No, this is completely reprehensible. This is a lack of oversight. This is industry in the Wild West within a major city of the country."



Introducing “Fumed,”
A New Podcast From Public Health Watch

Listen to “Fumed,” an investigative podcast about the people who live in the shadows of America’s chemical plants and oil refineries.



Channelview is a few miles upriver from the Houston Ship Channel, a 52-mile long waterway lined by hundreds of industrial facilities. The barges that transport chemicals to and from the channel's ships and chemical plants often dock in the majority-Latino community of 45,700.

The most recent tests in Channelview were conducted in June by scientists from Texas A&M University, who have a monitoring van similar to the TCEQ's. Their report hasn't been finalized, but Natalie Johnson, a respiratory toxicologist who leads the team, said they recorded instantaneous levels of benzene similar to the spikes the TCEQ found in 2021 and 2022. An instantaneous reading lasts for one second.

Johnson said she will share the results with the TCEQ and will hold a community meeting for residents in January.

A TCEQ spokesperson said the agency has no plans to address Channelview's benzene levels, because the annual averages recorded by the stationary monitor are within the state guideline.

Channelview's Benzene Crisis at a Glance

- New data show that residents of Channelview, Texas, were exposed to higher levels of cancer-causing benzene in 2021 than ever recorded in the community's 20-year history with the chemical. State regulators never told residents.
- If Channelview's benzene levels had been recorded in nearby Houston, residents would have received one evacuation order, eight shelter-in-place orders and eight alerts.

"These concentrations of benzene do not represent a risk to human health or the environment, and no further action is needed," the spokesperson said.

'Persistent and Significant' Emissions

A Public Health Watch investigation published last year found that Texas regulators have known since at least 2005 that Channelview residents are being exposed to high levels of benzene — and that the TCEQ

monitoring team has often recorded the highest benzene emissions in the southeastern corner of the community. That's where a barge-cleaning and chemical distribution facility called K-Solv is located less than 600 feet from houses.

The agency cut back on its mobile monitoring program in the mid-2000s and partnered with Texas universities and a private company — FluxSense Inc. — to periodically monitor chemical levels in Harris County, including Channelview.

FluxSense's most **recent report**, filed in 2023, doesn't mention K-Solv by name but includes maps that label the area immediately around the facility as "Site A." The report said that since at least 2013 FluxSense has "regularly noted" one source of "persistent and significant" emissions of benzene and several other chemicals that attack the nervous system. A TCEQ spokesperson confirmed that the source was Site A.



Scientists with the consulting firm FluxSense Inc. documented a large benzene plume on September 23, 2022, from "Site A," which is the immediate area around K-Solv. In the photo, K-Solv is behind the largest plume. Emissions peaked at 1068 parts of benzene per billion (ppb) parts of air and traveled through neighboring homes. Credit: FluxSense 2023 report

When a fire broke out among K-Solv's chemical tanks in 2021, the TCEQ's then director of monitoring said in an email to his staff that the facility was "known for benzene emissions."

K-Solv CEO Todd Riddle has consistently denied that the company is a major source of benzene emissions. Riddle declined to be interviewed for this story, but in an email he said his company's benzene emissions are "tiny" compared to "the other companies and barges upwind and around us."

"K-Solv is deeply committed to environmental stewardship and prioritizes the health and safety of our Channelview residential community," Riddle said. "We've invested millions of dollars in advanced pollution control systems to ensure a healthy environment for our employees and neighbors."

The TCEQ has allowed K-Solv to expand four times since the agency discovered high levels of benzene near the facility in 2005. K-Solv can now legally release almost 20 times more volatile organic compounds — which include benzene — than it did in 2005. Last year the TCEQ allowed K-Solv to open a second, smaller business in Channelview, which washes trucks that haul chemicals. It, too, releases volatile organic compounds into the air, according to its permit.

Trivializing the Threat

The TCEQ has taken two steps over the years that make Channelview's benzene problem look better on paper.

It loosened its benzene guidelines, even as other states were tightening their protections. The hourly benzene guideline was weakened by 620% (from 25 parts of benzene per billion parts of air, or ppb, to 180 ppb). The annual guideline was weakened by 40% (from 1 ppb to 1.4 ppb).

The TCEQ also moved the stationary monitor farther from K-Solv, and it's no longer downwind of the company. The agency said it chose the new location so it could install a more sophisticated monitor that was too large for the old site.

During the 18 months before the monitor was moved, it recorded rolling annual benzene averages that exceeded even the TCEQ's weakened annual guideline by up to 50%.

Since the move, annual benzene emissions have never exceeded the guideline, although they are rising.

In June, the TCEQ released guidelines to protect its field scientists from chemical emissions. It suggests they leave an area if instantaneous benzene levels exceed 1080 ppb, as they did four times during the Channelview trips.

Benzene levels improved after monitor moved farther from major polluter

When Channelview's stationary monitor was in its original location — downwind of K-Solv — its rolling annual averages often exceeded the state's former and current benzene guidelines. Since the TCEQ moved the monitor about a mile away in February 2021, levels have been far below the current guideline.

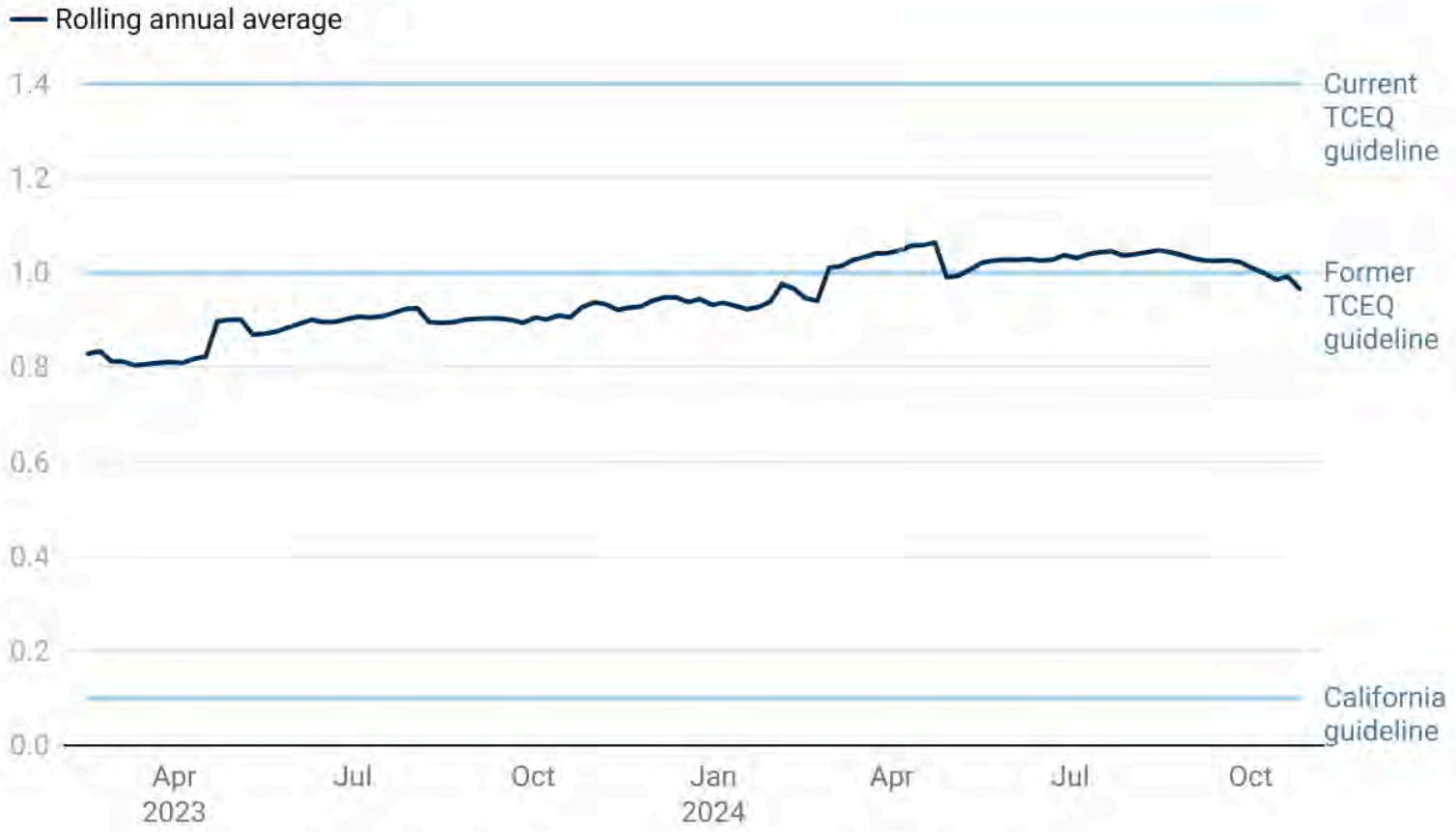


Chart represents parts of benzene per billion parts of air (ppb). The TCEQ used its former guideline of 1 ppb until 2008. It adopted its current annual guideline of 1.4 ppb in 2008.

Chart: Texas Community Health News • Source: Texas Commission on Environmental Quality • Created with Datawrapper

TCEQ Returns to Channelview

Unlike earlier TCEQ monitoring reports from Channelview, the reports from the 2021 and 2022 trips don't name K-Solv, or any other facility, as a source of pollution.

Tim Doty, who managed the TCEQ mobile monitoring team for 17 years, reviewed wind directions and sample locations included in documents filed with the reports. He said the data show that the scientists looked for benzene sources throughout south Channelview, including barges moored along the San Jacinto River and

facilities south of Channelview's homes. But, Doty said, they were clearly focused on emissions from K-Solv and from barges waiting to be cleaned at the company's dock.

"There's no doubt from looking at the data that the primary source of the elevated benzene concentrations was from around K-Solv," Doty said. "It's right there."

A TCEQ spokesperson said the agency doesn't identify sources of pollution until investigators follow up on the monitoring team's findings. A review of agency records shows that K-Solv was the only company investigated as a result of the 2021 and 2022 monitoring trips.

Higher Cancer Risks and Weak Oversight

- The cancer risk from chemical exposure in Channelview — 78 cases in one million people, according to one prominent scientist – is more than double the national average. But a Public Health Watch analysis shows the risk is likely higher, because an air pollution monitor used to gauge the risk isn't capturing the worst of the benzene emissions.
- The state's environmental watchdog — the Texas Commission on Environmental Quality, or TCEQ — says it won't intervene in Channelview, because annual readings at the monitor are below the state's benzene limit, which is one of the weakest in the nation.

On the October 2021 trip, the scientists collected data outside K-Solv and other facilities, including one of the country's largest refineries. The 36.2 ppb 40-minute average taken outside K-Solv was the highest of the day. The second highest average, taken in a 20-minute sample on industrial roads south of Channelview, was just 3.4 ppb.

The morning after the scientists left, a worker at a nearby plant complained to the TCEQ that K-Solv was releasing "very strong and concentrated natural gas and propane odors in the area." The fumes were so powerful that night-shift workers couldn't leave the building, according to the **TCEQ follow-up report**.

TCEQ scientists use a Differential UltraViolet Absorption Spectroscopy (DUVAS) instrument to identify emission hot spots. They then return to these locations with more sophisticated equipment to take more precise readings. In this DUVAS sample on November 8, 2021, benzene readings rose to the red level — above 300 ppb — outside K-Solv. Credit: TCEQ

The monitoring team returned to south Channelview less than two weeks later in November 2021.

One afternoon, the scientists heard a loud sound "similar to a pressure release or gasket opening from the direction of K-Solv," according to the **trip report**. About 45 seconds later, the benzene level rose above 500 ppb. It remained that high for about a minute.

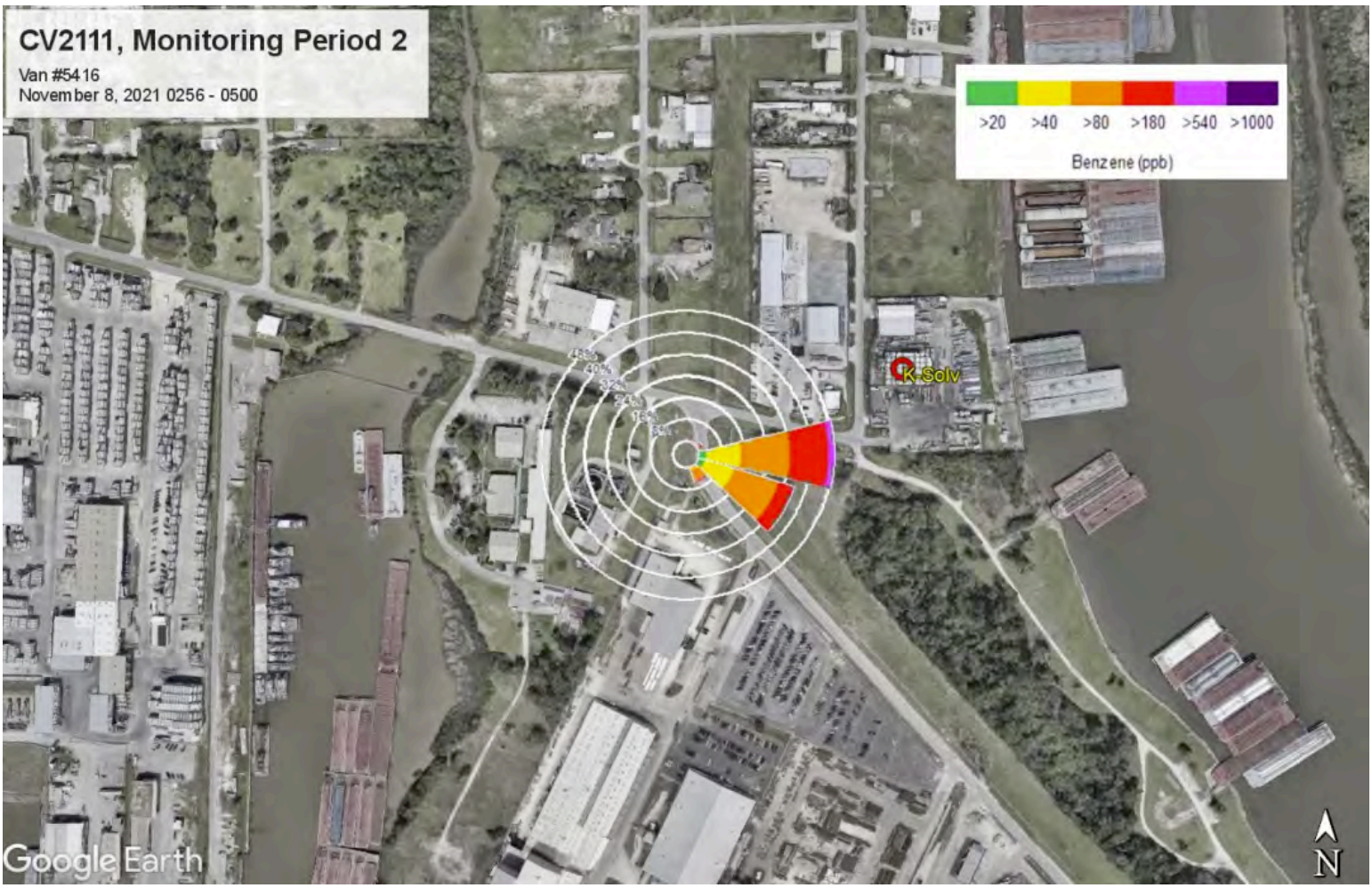
The sample's instantaneous levels peaked at 1,940 ppb — far above the 1,080 ppb where the TCEQ now suggests that scientists leave the area. The sample's maximum one-hour average was 85.2 ppb, more than 10 times higher than California's guideline.

Two samples exceeded even the state's weakened one-hour guideline of 180 ppb.

Before sunrise one morning, the scientists recorded a one-hour average of 203.5 ppb across the street from a residential neighborhood. According to Doty's review of the TCEQ data, the sample was primarily downwind of K-Solv, about 500 feet west of the facility. The scientists smelled strong gasoline odors and suffered

headaches and lightheadedness, according to **a report by TCEQ toxicologists**. The instantaneous readings were so high — between 800 and 1,000 ppb — that they left the area and monitored remotely.

In Houston, officials would have issued a shelter-in-place order, but Channelview residents received no notifications.



In the early hours of Nov. 8, 2021, TCEQ field scientists recorded a one-hour benzene average of 203.5 ppb, which exceeded the state guideline. The scientists reported having headaches and had to leave the area. Credit: TCEQ Mobile Monitoring Report for November 2021 trip

Eighteen-and-a-half hours later, when the scientists were working about a mile away, they had to monitor remotely again. This time, the instantaneous readings skyrocketed to 2,487.9 ppb, more than twice the concentration at which the TCEQ suggests its staff leave the area. The highest recorded one-hour average was 534.6 ppb, nearly three times Texas' guideline and almost 67 times the California limit. Scientists once again reported strong gasoline odors and headaches.

If such readings had been taken in Houston, the surrounding neighborhood would have been evacuated. Again, Channelview residents weren't notified.

Although the trip report didn't identify a source of the benzene, it noted that the sample was taken near five facilities, including a refinery, a chemical tank repair company and K-Solv. K-Solv was the only company the TCEQ investigated afterward.

In addition to benzene, the mobile monitoring team recorded high levels of toluene, which can cause nausea and fatigue, and 1,3-butadiene, which can cause leukemia. The TCEQ report said it didn't discuss these findings because the levels didn't exceed state guidelines.

> ***"It's obvious that they didn't want people to see these numbers. Two years later is pretty outrageous — more than pretty outrageous."***
>
> — TIM DOTY, FORMER MANAGER OF THE TCEQ MONITORING TEAM

Three weeks after the scientists' November trip, the worker who had complained about K-Solv in October contacted the agency again. The worker said the odor from K-Solv infiltrated the vents of their job site. Each time it appeared, the worker had watery, itchy eyes, a runny nose and a headache "due to the strength of the odor."

The same worker submitted a third complaint in February 2022.

"The complainant stated that the odors have been occurring for more than two years and is mainly present overnight but disappears shortly after sunrise," the follow-up investigation report said.

State Monitor Failed to Record Channelview's Highest Benzene Readings

On November 8, 2021, TCEQ field scientists recorded two one-hour benzene averages that exceeded the state's guideline. But neither showed up on the TCEQ's stationary monitor, whose readings are used to gauge residents' cancer risk. When the scientists measured a one-hour average of 203.5 parts

of benzene per billion parts of air (ppb), the monitor recorded only 1.2 ppb. When the scientists recorded an hourly average of 534.6 ppb, the monitor's highest average was just 7.8 ppb.



Credit: Andrew Morris

The monitoring team traveled to Channelview again in May 2022 and **recorded benzene levels** outside K-Solv that were well within the state's guideline. But **the results** show large differences between readings taken outside the company and what the stationary monitor recorded. The lowest one-hour average outside K-Solv was 4.3 ppb. The highest average at the monitor during that period was just 0.1 ppb.

Four months later, FluxSense took chemical readings throughout Harris County for studies conducted by the TCEQ and the University of Houston.

The TCEQ's chief toxicologist asked the scientists to pay attention to Channelview, "particularly for benzene," according to internal emails. A TCEQ air official gave the team a **Google Map** showing "locations of interests." K-Solv was the only facility labeled in south Channelview.

The FluxSense report said that when the wind blew from east to west, the scientists "almost always detected" benzene at the fence line of Site A, which is the immediate area around K-Solv.

"It is apparent that benzene emitted from Channelview Site A … is transported through the [neighboring] residential area," the report said.

When to Flee Benzene

- The TCEQ recommends that its staff leave an area if benzene readings reach a certain level, which they did four times in Channelview in 2021.

The average benzene concentration at Site A was the highest recorded anywhere in the county — almost 5 times higher than the second-highest average, which was taken across the Ship Channel in Deer Park. One plume downwind of Site A had an average benzene concentration of 168 ppb and a maximum instantaneous reading of 1065 ppb.



FluxSense scientists captured benzene levels throughout Channelview in September 2022. In one sample, concentrations outside Site A exceeded 100 ppb but dropped to below 2.5 ppb by the time emissions reached the TCEQ's stationary monitor about a mile away. Credit: FluxSense 2023 report

FluxSense also noted that during daylight Site A's emissions were "significantly diluted" by the time they reached the stationary monitor, likely "due to the distance" — about a mile — between the facility and the monitor.

Riddle, K-Solv's CEO, said the company is "responsible for less than 0.01% of the share of benzene emissions in the area," according to its environmental consultants. He did not respond to questions about the data supporting that number.

Riddle said that when TCEQ investigators visited the facility in 2021 and 2022, there were "at least four occasions" when they found no "visible emissions" or volatile organic compounds.

Investigations and a Fine

In May — two years after the TCEQ monitoring team's 2022 trip to Channelview — the agency finalized its last report and **proposed a $164,996 penalty** against K-Solv for 17 violations found during follow-up investigations.

Doty, the former TCEQ scientist, said the delay between the monitoring trips and the finalized reports was "ridiculous." He said it typically took his team four to six months to finalize reports.

"It's obvious that they didn't want people to see these numbers," Doty said. "Two years later is pretty outrageous — more than pretty outrageous."

The TCEQ said its timeline for preparing reports varies depending on the project.

"For this project, the scope was broad, there was new instrumentation, and there was a large volume of data," an agency spokesperson said. "In the interim period before the report was final, communication between the Monitoring Division and regional office occurred to facilitate follow-up activities."

The penalty document the TCEQ sent K-Solv detailed the company's 17 alleged violations.

It said the company ran its pollution control equipment improperly for nearly 74 hours between November 12 and December 31, 2021. It said K-Solv committed the same violation almost a year later: this time for 202 hours and 55 minutes between January and April 2023.

K-Solv also didn't load liquid chemicals in a way that limits emissions, the TCEQ document said, and it sometimes stored benzene at 100% concentration — twice as much as its permit allows. Five violations were

for not maintaining required records, including annual testing for tank trucks and weekly inspections for several pieces of equipment.

Tim Doty, the former manager of the TCEQ's mobile monitoring team, used a handheld, infrared camera to record volatile organic compounds — a class of chemicals that includes benzene — being released from a K-Solv storage tank on August 28, 2023. Credit: Tim Doty

The TCEQ gave K-Solv a month to respond to the state's allegations, and then approved a two-week extension. After K-Solv missed that deadline, the agency sent the case to its litigation division.

Riddle blamed one of the violations on a clerical error that led the company to mistakenly record that it had stored benzene at 100% concentration. He said K-Solv went ahead and signed the penalty documents — including the benzene violation — because it was "the simplest way to resolve the matter."

K-Solv did not pay the full $164,996 fine. Instead, it received a $32,999 "one-time" discount. The penalty document says companies get that discount if they "satisfactorily comply with all the ordering provisions within the time frames listed."

Public Health Watch asked the TCEQ why K-Solv qualified for the discount despite missing the original deadline and the two-week extension. An agency spokesperson said, "in September 2024, K-Solv signed the

order and paid the penalty amount in the proposed agreed order, thereby achieving settlement."

An Unreported Release

In November, K-Solv had another major chemical leak.

On a Saturday afternoon, the Channelview Fire Department received a call about a strong propane smell from an unknown source. Firefighters discovered that a 250-gallon tank at K-Solv was leaking liquid butyl acetate and "creating a vapor cloud" that was approaching homes, according to **the fire department's report**.

Benzene Releases Allowed

- One Channelview company, K-Solv, has been "known for benzene emissions" for years, according to state records. Still, the TCEQ let the company expand and legally release even more benzene. In November, the company had another leak that led to an evacuation of three nearby houses. K-Solv has denied that it's a major source of benzene in the area.

Butyl acetate is a highly flammable chemical found in lacquers and nail-polish removers. In large amounts, it can cause shortness of breath, confusion and fainting. In a statement to the media, K-Solv's director of environmental health, safety and security described butyl acetate as "a product used in everyday perfume and personal care products."

Firefighters suggested that residents of three nearby houses evacuate until the leak was contained, about two and a half hours later.

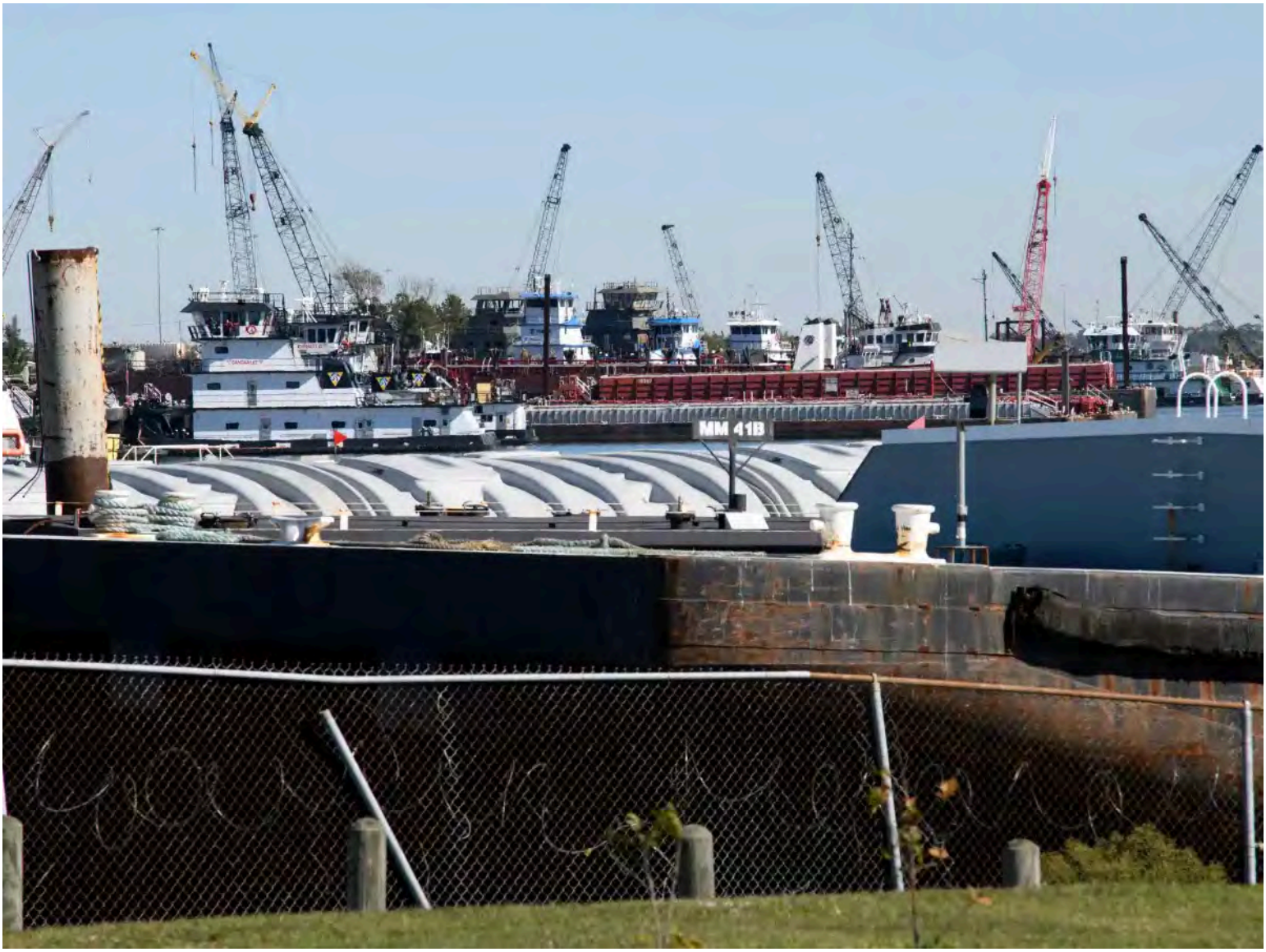
Polluting facilities are required to report butyl acetate leaks to the TCEQ only if the emissions exceed 100 pounds.

A TCEQ spokesperson said the agency contacted K-Solv about the incident and the company "indicated the release was below the reportable quantity." The spokesperson said that the agency coordinated with Harris County Pollution Control Services and was told "there were no offsite impacts and further assistance from TCEQ was not requested."

K-Solv said it is conducting an internal investigation to prevent similar incidents.

“K-Solv is proud of its proactive approach to environmental management,” the company said in its statement to the media, “and will continue to work diligently to safeguard the health and well-being of Channelview residents – many of whom are our valued employees.”

MORE ON TOXIC TEXAS AIR



‘Bad Actors Must Face Consequences’: Texas Legislator Ups Ante in Response to Public Health Watch Investigation in Channelview



New Report Calls Houston Ship Channel a ‘Racial Sacrifice Zone’ for Human Rights



A Texas Community Is Being Bombarded by Cancer-Causing Benzene. State Officials Have Known for Nearly Two Decades.

EXHIBIT 7C

The Trump Administration is working to reopen the government for the American people. Mission-critical activities of CDC will continue during the Democrat-led government shutdown. Certain federal government activities have ceased due to a lack of appropriated funding. During the government shutdown, only web sites supporting excepted functions will be updated. As a result, the information on this website may not be up to date and the agency may not be able to respond to inquiries.

Chemical Emergencies

Benzene

Chemical Fact Sheet

For Everyone

SEPTEMBER 6, 2024

KEY POINTS

- Benzene is a colorless or light-yellow liquid chemical at room temperature.
- Signs and symptoms of benzene poisoning depend on how you were exposed.
- Get clean and get medical care if you were exposed.

Background

Benzene is a liquid chemical at room temperature. It either has no color or is light-yellow. It has a sweet smell and is very flammable.

Benzene evaporates into the air very quickly. It is heavier than air and may sink into lower areas. Benzene dissolves only a little in water and will float on top of water.

Where it is found

Benzene is formed in nature and from human activities. Natural sources include volcanoes and forest fires. It is also a natural part of crude oil, gasoline, and cigarette smoke.

Benzene is used often in the United States. It is in the top 20 produced chemicals by quantity. Some industries use benzene to make other chemicals that are used to make plastics, resins, and nylon and synthetic fibers.

It is also used to make:

- Detergents
- Drugs
- Dyes
- Some types of lubricants
- Pesticides
- Rubbers

How it works

Benzene works by causing cells not to work correctly.

For example, it can cause bone marrow not to produce enough red blood cells. This can lead to anemia. It can also hurt the immune system by changing blood levels of antibodies and causing the loss of white blood cells.

Signs and symptoms

The level of benzene poisoning depends on the amount, how someone was exposed, and for how long. It also depends on the person's age and medical conditions they may have.

These signs and symptoms may show up within minutes to several hours. Showing these signs and symptoms does not necessarily mean that a person has been exposed to benzene.

If breathed in:

- Drowsiness and dizziness
- Fast or irregular heartbeat
- Headaches
- Tremors
- Confusion
- Unconsciousness
- Death (at very high levels)

If swallowed:

- Vomiting or irritation of the stomach
- Dizziness
- Sleepiness
- Convulsions (uncontrolled muscle shaking)
- Fast or irregular heartbeat
- Death (at very high levels)

If a person vomits because they ate or drank something with benzene, the vomit could be sucked into the lungs. This can cause breathing problems and coughing.

If benzene touches the eyes, skin, or lungs, it can cause injury and irritation.

Exposure

People working in jobs that make or use benzene may be exposed to the highest levels of it.

Outdoors

Low levels of benzene can be found at:

- Tobacco smoke
- Gas stations
- Car exhaust
- Industrial emissions

The air around hazardous waste sites or gas stations can contain higher levels of benzene than in other areas.

Benzene leaks from underground storage tanks or from hazardous waste sites containing benzene can contaminate well water.

Indoors

Indoor air generally contains levels of benzene higher than those in outdoor air. It can come from products such as:

- Glues
- Paints
- Furniture wax
- Detergents

What to do if you are exposed

Get fresh air by leaving the area where the benzene is. Moving to an area with fresh air is a good way to reduce the possibility of death from benzene.

If benzene was released outside, move away from the area. If benzene was released indoors, get out of the building.

If you're in immediate danger

If you swallowed benzene, do not induce vomiting or drink fluids. Get medical attention right away.

If you think you were exposed, take your clothes off, wash your body, and get medical care as quickly as possible.

Take off your clothes

Remove the clothing as quickly as possible. Cut clothes off instead of pulling it over the head. If you are helping others, do not touch unsafe areas.

Wash your body

Wash any benzene from your skin with lots of soap and water. Washing with soap and water will protect you from any chemicals on your body.

If your eyes are burning or your vision is blurred, rinse your eyes with plain water for 10 to 15 minutes.

If you wear contacts, remove them and put them with the dirty clothing. Do not put the contacts back in your eyes (even if they are not disposable contacts).

If you wear eyeglasses, wash them with soap and water. You can put your eyeglasses back on after you wash them.

Throw your clothes away

After you have washed yourself, place your clothing inside a plastic bag. Do not touch unsafe areas of the clothing. If you have to touch unsafe areas, or you aren't sure where the unsafe areas are, wear rubber gloves. You can also use tongs, tool handles, sticks, or similar objects to put the clothing in the bag.

Anything that touches the dirty clothing should also be placed in the bag. If you wear contacts, put them in the plastic bag, too.

Tie the bag, and then put that bag inside another plastic bag. Throwing away your clothes this way helps protect you and others from any chemicals that might be on your clothes.

When the local or state health department or emergency team arrive, tell them what you did with your clothes. The health department or emergency team will arrange for further disposal. Do not handle the plastic bags yourself.

For more information about cleaning your body and throwing away your clothes after a chemical exposure, visit "About Getting Clean."

Evacuate or "shelter in place"

If you are near a benzene release, emergency teams may tell you to evacuate the area or "shelter in place" inside.

For more information on evacuation during a chemical emergency, visit "Responding to Evacuation."

For more information on sheltering in place during a chemical emergency, visit "Responding to Sheltering in Place."

Treatment

The most important thing is for people to **seek medical treatment as soon as possible**.

No cure exists for benzene poisoning. Benzene poisoning is treated with supportive medical care in a hospital.

Long-term health effects

Blood

Long-term exposure, or exposure of a year or more, to benzene can affect the blood. Benzene causes harmful effects on bone marrow and can cause a decrease in red blood cells, leading to anemia. It can also cause excessive bleeding and affect the immune system, increasing the chance for infection.

Bones

Studies in animals show low birth weights, bones being formed late, and bone marrow damage when pregnant animals breathed benzene.

Cancer

The Department of Health and Human Services (DHHS) has said that benzene causes cancer in humans. Long-term exposure to high levels of benzene in the air can cause leukemia, a blood-related cancer.

Fertility

Some women who breathed high levels of benzene for many months had irregular menstrual periods. Some women also had a decrease in the size of their ovaries. It is not known whether benzene exposure affects the developing fetus in pregnant women or fertility in men.

More information

Pocket Guide to Chemical Hazards

You can also contact one of the following:

- Regional poison control center: 1-800-222-1222
- Centers for Disease Control and Prevention
  - Public Response Hotline (CDC): 800-CDC-INFO
  - Teletypewriter (TTY): 888-232-6348
  - E-mail inquiries: cdcinfo@cdc.gov

SOURCES

CONTENT SOURCE:
National Center for Environmental Health

SOURCES

- National Center for Environmental Health (NCEH)

EXHIBIT 8

Susan Foster

PO Box 1444
Lyons, CO 80540
susan.foster04@gmail.com
(858) 756-3532

July 14, 2025

To: San Francisco Planning Commissioners
49 South Van Ness Avenue, San Francisco, CA 95103

Chair So, Vice-Chair Moore, & Commissioners Braun, Williams, Campbell, Imperial, McGarry:
Cc: Commission Exec. Director, Commission Secretary, John Darcey Planner, Department of Recreation

RE: OPPOSE: ATT *proposed telecommunication facility at 350 Amber Drive in Diamond Heights Neighborhood*

I am a Fire and Utility Consultant, an Honorary Firefighter with the San Diego Fire Department, and I have worked with attorneys on telecommunications ordinances including fire prevention from 2001 to the present. Most recently, the unanimously passed Malibu Resolution 21-17 for macro towers on private property included our Fire Safety Protocol for all macro towers coming into Malibu. The City Council applied this to small cells, as well. I was the co-author with electrical engineer Tony Simmons, PE of the Fire Safety Protocol. We require all applicants submit eight electrical engineering design plans signed and sealed by a telecommunications electrical engineer guaranteeing their safety. This is the only city in the country that has this requirement.

Why was our team brought in? This is the city that has burned twice at the hands of telecom. In 2007 the Malibu Canyon Fire was caused by multiple carriers, including AT&T, overloading Southern California Edison utility poles. Three poles snapped in the Santa Ana winds and ignited the grass below. In 2018, the Woolsey Fire was started, in whole or in part, by electrical equipment belonging to a small telecommunications company that was incorporated into Southern California Edison.

In May 2018 a telecommunications inspector noticed some of the telecommunications equipment was broken and had lost its ground. The telecommunications inspector failed to mark this repair as urgent. In November 2018 this equipment, still in dangerous disrepair, was a significant part of the 2-part ignition source that caused the Woolsey Fire. Combined those fires caused over $6 billion in damages. Some burn scars from homes that were destroyed remain to this day.

I'm sure you are aware that the Palisades Fire destroyed one-third of Malibu in January. Even though the Palisades Fire was not telecommunications-related, it's destruction on the heels of two devastating fires heightens the vulnerability faced by the whole of California.

Macro towers do pose a fire risk. These fires can be due to deficient structural engineering or electrical engineering. Many of these fires are covered up by the telecommunications industry. I have worked with the firefighters of California for over two decades. I am aware that firefighting equipment worth millions of dollars is sometimes gifted to stations that do not submit fire incident reports on macro tower fires. No government agency is keeping track of these fires and some within the telecommunications industry do their best to cover them up.

When the carrier reads my letter, they will know exactly what I am referring to.

You have heard for years now that cell towers cannot be denied placement based on health concerns. However, what you may be unaware of based on self-serving advice from industry-leaning attorneys/consultants, is that safety <u>is</u> yours to regulate. Safety also means taking great care to ensure electrical and structural engineering rigor with respect to cell towers.

Safety is taking care to have appropriate setbacks from property and densely populated buildings like schools, neighborhoods, daycare centers and highly flammable parks. People need time to escape from a cell tower fire. Every cell tower is an electrical device, and every electrical device is going to fail. One of the likely consequences of electrical failure is fire. When a cell tower catches on fire, it cannot be extinguished through conventional means. Anyone putting water on a fire before the grid has been cut may be electrocuted. Cutting the grid can take between 30 and 60 minutes.

AT&T carries the FirstNET signal, FirstNET is for emergency services communication. All cell towers carrying emergency services communication must adhere to APCO ANSI 2.106.1–2019. This requirement consists of 15-pages of structural engineering requirements for site hardening for any structure that is going to convey emergency services communication. That is required by the federal government.

It is my understanding that the proposed AT&T site for this macro tower is on landfill. From a structural engineering point of view this does not make sense. In fact, it is a dangerous location.

It is also my understanding that the proposed site is adjacent to a park with abundant, flammable grass and it is surrounded by eucalyptus trees. From a fire perspective, I cannot think of a worse location. Eucalyptus trees are highly flammable and when they burn, they literally explode. Under Santa Ana or El Diablo conditions those embers may be carried for 2 – 3 miles. With low humidity and abundant dry fuel, a wind event would enable embers to ignite new fires miles ahead of the main fire front.

I would also point out that in the immediate and nearby neighborhoods which includes a children's playground, a veterinary hospital, a daycare/nursery, the police academy, a drugstore and countless homes, many would have an extremely difficult time exiting the neighborhood(s) if this macro tower catches on fire. Multiple neighbors with the close by, some within 500 feet.

Additionally, an electrical fire can take the temperature inside a macro tower to 4000° in less than a second. Temperatures of an arc flash inside the tower can reach as much is 35,000 °F. This is three times the estimated temperature of the sun's surface.

I will give you an example of what can happen to a macro tower when there is an electrical fire inside the cell tower. In March 2021, a Chula Vista, California fire was caused by an AT&T cell tower that was partially concealed in a light fixture around a track at Otay Ranch High School. The tower burst into flames at 7:30 PM on a Tuesday evening. The Fire Incident Report was obtained through a CPRA request. The area of origin was within the equipment; the heat source was "electrical arcing." When the fire department arrived, the 100-ft pole appeared to have an internal fire that traveled up the pole to the cell phone equipment and stadium lighting at the top of the pole. Firefighters maintained a safe distance until they could verify all power supply to the pole had been secured. As they were waiting for the representative from SDG&E to arrive to confirm the power had been cut, the heat of the fire due to arcing caused the steel pole to become molten plasma. It collapsed onto the bleachers near the football field, burning the track, and destroying the bleachers.

Because the grid must be cut before a cell tower fire can be extinguished through conventional means, a fire from this proposed cell tower fight could literally consume the adjacent neighborhood and the above-named vulnerable populations before people have a chance to evacuate. Safety must be your primary concern.

The FCC has repeatedly stated that safety belongs to the municipalities to regulate. *In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting; 2012 Biennial Review of Telecommunications Regulations*, 29 FCC Rcd 12865, 12945, ¶188 (2014)

After scrutinizing engineering designs on applications coming into the cities where we have worked, our team engineer determined approximately 80% of the engineering designs for macro towers and small cells were deficient.

Our team working in Malibu – W. Scott McCollough, former Texas Assistant Attorney General for Telecommunications & Utilities, engineer Tony Simmons, P.E., and I, after extensive research, linked four major fires to telecommunications equipment within the last 15 years in Southern California alone, costing well over $6 billion in damages. In brief these fires are:

- Guejito Fire (2007) in San Diego which merged into the explosive Witch Creek Fire.
- Malibu Canyon Fire (2007).
- Woolsey Fire in Malibu & LA County (2018) which burned for one month, took the lives of three people trying to escape.
- Silverado Fire in Irvine (2020).

It is particularly germane to note that in the Malibu Canyon Fire, AT&T was directly involved in the initiation of this 2007 fire. The California Public Utilities Commission (CPUC) accused all parties the CPUC found to be negligent in the initiation of the Malibu Canyon Fire to have impeded the fire investigation.

These parties included: Southern California Edison (SCE), AT&T, Verizon, Sprint (now T-Mobile) and NextG, now owned by Crown Castle. Because AT&T, Verizon and Sprint admitted to their participation in the initiation of the fire without having to litigate, the CPUC and the Safety and Enforcement Division (SED) were more critical of and punitive with SCE and NextG.[1]

It should be of great significance to the San Francisco Planning Commission that the CPUC accused all parties – including AT&T – in the Malibu Canyon Fire of failing to cooperate fully in the fire investigation. If the parties are negligent in the first place, and fail to cooperate in or purposely impede the fire investigation, how can they be trusted with respect to fire safety going forward?

We are supposed to learn from mistakes whether it be structural overloading which falls under the umbrella of civil engineering, or an electrical design flaw which falls under electrical engineering. If mistakes are corrected, there is a greater level of trust for that party going forward. When the California Public Utilities Commission accuses all parties including AT&T of impeding the investigation, from a fire safety vantage point, trust is lost.

Please find two attachments. One is an aerial view of the proposed tower location, and another is titled "Monopole location". Both assisted me in making the best fire safety assessment with routes of egress in mind, and the nearby population in mind, as well. One of the most difficult evacuations involves young children. Please keep this vulnerable population at the top of your safety priority list as you make your critical decision.

Cell towers do cause fires, and I cannot emphasize enough how dangerous it is in this location surrounded by eucalyptus trees with a foliage filled canyon on one side and a cluster of densely populated areas on the other. Fires do occur when towers collapse for structural insecurity, and a cell tower of this height with the required ancillary equipment may present significant structural challenges in the future because they would be built on landfill. I do not know if the site could pass the required APCO ANSI 2.106.1–2019 protocol. The carrier may not have told you about this protocol, but the federal government requires it.

Respectfully submitted for the record,

SUSAN FOSTER
Honorary Firefighter SDFD
Fire & Utility Consultant

Attachments (2)

[1] DECISION CONDITIONALLY APPROVING THE SOUTHERN CALIFORNIA EDISON COMPANY SETTLEMENT AGREEMENT REGARDING THE MALIBU CANYON FIRE, BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA, Decision 13-09-028 September 19, 2013.

EXHIBIT 9

PROTECTING MALIBU'S FUTURE:

PREVENTING ELECTRICAL FIRES IN CELL TOWERS BY INTRODUCING ENHANCED BUT GENERALLY ACCEPTED ENGINEERING DESIGN RIGOR AND ADEQUATE PROOF OF WORK IN THE APPLICATION

Susan Foster & Tony Simmons, P.E.

[Updated 2/16/2022; S. Foster]

INTRODUCTION

The fire risk in Malibu is extreme. Wireless Communication Facility (WCF) proliferation increases the possibility of electrical fires. As such, electrical fire safety must be a priority for the City.

A group of Malibu residents (referred to here as the Community) have been attempting to work with the City to help minimize Malibu's fire risk from WCF installations. This white paper explains the Community's proposed safety design and application content requirements. These proposed requirements are tailored to Wireless Communications Facility installations in areas with dry vegetation, like Malibu. Some of the language was taken from ordinances in Encinitas and Sebastopol, while much of it is new. The new language is necessary because of the recent discovery that national, state and local electrical codes have expressed or implicit exemptions for "public utilities." *See, e.g.*, California Electric Code Section 89.101.3.3(4) and (5) and "public utility" exclusion in Los Angeles County Electric Code Sections 80-3 and 80.6. There are similar exemptions in NFPA documents. Therefore, merely adopting the Electric Code, as Staff proposes, will do nothing. Malibu will have no electrical safety standards for WCFs unless our proposals are adopted.

There are generally accepted standards for most other buildings and structures, including installations that house extensive and complicated electronics with similar characteristics to those employed as part of a WCF. The Community's proposed design standards incorporate those standards. In other words, we basically eliminated the "exception" so the general standards can apply. As a result, and consistent with FCC rules, Malibu will be enforcing "generally applicable building, structural, electrical, and safety codes and other laws codifying objective standards reasonably related to health and safety." *In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting; 2012 Biennial Review of Telecommunications Regulations*, 29 FCC Rcd 12865, 12945, ¶188 (2014).

Separately, the Community's proposal sets out the information that must be contained in the application. The design is important, but it is equally crucial that applicants be required to show their work, provided in a way that allows for independent verification and analysis. Only then can Malibu residents be assured that every possible step has been taken to minimize the risk of yet another wildfire caused or made worse by equipment breakdown in a WCF.

This paper provides specific and detailed explanations for the requirements we propose to help mitigate the profound fire risks in Malibu. It explains what we need by way of engineering up-front design and what is required for the telecommunications carrier to "show its work" in the permit application. Carriers will have their own professional engineers run their equipment through basic tests or produce standard design diagrams with an engineer's seal. Those scrutinizing the application will be able to independently verify the work was indeed done by the appropriate qualified personnel. This design and application content rigor should catch most design flaws that could, if left undetected, put Malibu at greater risk for fire.

Malibu bears greater risk if telecom cuts corners in the engineering and design process. Our proposal requires just over a dozen documents in the Application, signed off on by a professional engineer employed by telecom. Those documents will be reviewed by Malibu's permitting and enforcement departments and, if everything is in order, facilities will be approved for installation in the city. We are simply asking carriers to do due diligence and submit the right paperwork to the City when they apply. If they are going to come into Malibu, they must do so safely. It's that simple.

We present examples below of failure to scrutinize electrical equipment and utilize professional engineers to help protect life, health and property. These examples will be familiar to every member of the Planning Commission and, we trust, will serve as a reminder to all of us that engineering rigor and proof of work applied early in the process will protect the City from potentially catastrophic failures later on.

We also provide several examples of the ways electrical fires can start in cell towers and why the new small cell infrastructure poses unique threats to Malibu. In addition, we demonstrate that setbacks and separation will accommodate telecommunications yet allow enough space and distance for residents to escape should an electrical fire still occur. Electrical fires cannot be extinguished by homeowners or even firefighters until power to the facility is cut by the utility. In some instances, de-energization of a cell tower has taken over 60 minutes. In such a circumstance, distance from residences, schools and other buildings may mean the difference between life and death.

Homeowners should never fight a cell tower fire even if it is directly in front of their home. To fight an electrical fire before the tower has been de-energized by the local utility (10 to 60 minutes) risks electrocution. Residents of Malibu must flee their homes in the event of an electrical fire and that is why distance between towers and setbacks from homes is critical.

Finally, we urge the Planning Commission and Staff to recognize that the federal government and public safety officials consider wireless infrastructure to be essential infrastructure. Therefore, any hesitation on the part of Staff to require our electric fire safety protocol may be allayed by appreciating that the infrastructure itself needs to be protected. Attempts by carriers to introduce slipshod and inferior design, materials and products in Malibu should be rejected.

We have been asked if our electric fire safety protocol is new and if electric fire safety requirements have been adopted by other cities. The answer is yes, and the answer is no. We know some cities are beginning to write into their small cell ordinances that electric codes should

be adhered to because of the growing awareness of electrical fire risk in cell towers very close to homes and schools. As such, cities have attempted to require electric fire safety protocols. But it appears most cities have not discovered the "loophole" arising from the public utility exception that renders their efforts to protect their cities ineffective. As far as we can tell, Malibu will be the first to identify this problem and actually force an objective, generally applicable standard for electric fire safety.

Our proposed electric fire safety requirements are the result of in-depth collaboration between Tony Simmons, P.E., a professional engineer with decades of electric fire safety experience and Susan Foster, writer and an Honorary Firefighter with the San Diego Fire Department and a member of the 2001 Task Force in San Diego County that created the County's first wireless ordinance. That ordinance survived a challenge all the way to the U.S. Supreme Court. Susan Foster has worked with rank-and-file firefighters in California and across the country over the last 20 years on the issue of RF radiation health and safety.

Mr. Simmons is a professional electrical engineer licensed by the States of California and Nevada. He is a recognized subject matter expert on electrical safety. As an employee of NV Energy, which served customers in California and Nevada, he was responsible for ensuring that no gap existed between the safety standards for customer-owned equipment and utility-owned equipment. Mr. Simmons designed a specialized test facility that integrated electrical equipment from East Asia, Europe, and the United States. This test site incorporated grounded and ungrounded electrical systems from all three regions and required Mr. Simmons to integrate standards from three regions to adhere to the technical requirements of the U.S. National Electric Code.

Residents and city planners in various California cities have contacted Susan Foster seeking assistance in their efforts to create safer WCF ordinances by taking electric fire safety into account. Additionally, Susan Foster has met with city councilmembers and engineering/IT personnel in several cities in Colorado, a state that also experienced an unprecedented fire threat in 2020 and more recently the December 2021 Marshall Fire which burned 6000 urban and suburban acres in six hours in Boulder County. Similarly, Tony Simmons' expertise has been requested by several California cities regarding electric fire safety and engineering. Mr. Simmons and Susan Foster are working on electric fire safety amendments for three Colorado cities.

As it relates to Malibu, Susan Foster and Tony Simmons have worked over the past six months with attorney W. Scott McCollough, who has an extensive 37-year career in law and policy and was the Assistant Texas Attorney General responsible for utility matters, to arrive at our proposed electric fire safety requirements so as to minimize the chances of WCF electrical fires in Malibu. We did not know, until we pooled our collective knowledge and compared federal and state laws and local ordinances and regulations, that telecom was exempt from otherwise generally applicable codes and standards. We anticipate telecom is aware of the exception but chose to remain silent. This problem has now arrived at Malibu's doorstep and must be solved. We hope it will be resolved in favor of ensuring the safety of the city and its residents. News of this issue and problem is spreading, but Malibu has the opportunity – and responsibility – to lead the way, as it is known to do in matters of great importance.

WHY ELECTRICAL FIRE SAFETY?

We propose fire safety requirements that consider Malibu's unique geographic location, its ongoing seismic activity, a marine climate conducive to expedited corrosion of WCF equipment, an abundance of dry brush, limited escape routes out of town, and year-round tourism which can swell the population by 4,000 visitors on any given weekend – adding to the burden on access/exit roads.

Fire risks in Malibu are not hypothetical conjecture. This city has burned twice just in the last 15 years. Over the last nine decades, at least 30 wildfires have destroyed parts of this coastal community, with the most recent Woolsey Fire (the largest in recorded history), consuming almost 100,000 acres. The ongoing, severe drought in California, along with record high temperatures, makes the focus on fire prevention more urgent than ever.

Preventing fires in Malibu has been a full-time job for Mayor Mikke Pierson since the beginning of his tenure on City Council. He was elected in 2018 two days before the Woolsey Fire broke out. Over 400 homes were lost with catastrophic impact on Malibu; many residents have still not made it through the permit stage for rebuilding. From a recent posting in Malibu's News Carousel:

> "*Wildfire has always been Malibu's number-one public safety threat, but the size, duration and severity of the Woolsey Fire was unprecedented, and showed us the dangerous new normal of drought, climate change and California mega-fires," said Mayor Mikke Pierson. "I am proud of the progress we have made in developing strategies to be even more prepared for disasters, including this siren system, which could be a powerful step toward community-wide preparedness*."

The documents provided to the Planning Commission by Staff do not show sufficient commitment to treating fire as Malibu's number one public safety threat, as articulated by Mayor Pierson. Our plea, and that of the Community, is that the Planning Commission and City Council rectify this error. There must be strong and specific design, application content and inspection language in the Ordinance and Resolution. The whole point of applying electric engineering rigor is to make sure that when a device fails – and they all do at some point – it fails safely. Without this kind of rigor for WCFs, Malibu will expose itself to significant risk of yet another preventable fire.

We have therefore been detailed and specific about what is required to reduce the risk. We are not asking for anything that is not already required of every business in Malibu that wants to install parking lot lighting, a sign in front of their place of business, or install complicated electronics inside their building. Citizens have a right to demand engineering rigor for the projects coming into Malibu extremely close to people's homes, schools, daycare centers, parks, places of business, restaurants and in every facet of life.

We presently have no idea what the Planning Director will require in the applications. If application content is left entirely up to the Planning Director, the form can be changed at whim, especially after a personnel change. The application, however, is not just for Staff. The Planning Commission extensively relies on it, as does anyone participating in the application process.

Unlike Staff and the Commission, public participants have no right or practical ability to require additional information beyond what is in the application. Their ability to reasonably participate and provide input is entirely dependent on the quantity and quality of the information in the application. The public needs and deserves more than the Staff materials provide.

The Community wants more rigorous requirements, particularly relating to up-front design by qualified and licensed personnel, and full disclosure in the application stage. In other words, we expect every application submitted to Malibu to have 14 documents indicating successful completion of a test, a diagram, a design schematic, and a list of any potentially hazardous substances, all signed and sealed by a licensed professional engineer. The Community's protocol was designed by an electrical engineer with decades of experience in applying engineering rigor to protect life, health and property. He knows what is needed for both design and proof of work. He knows what is feasible and reasonable.

To date, our fire safety proposals have been rejected by Staff/City Attorneys. We are particularly concerned that not only does our groundbreaking electric safety protocol get removed from every draft, but so does the fire safety wording we adopted from ordinances already passed by Encinitas and Sebastopol. That makes no sense for a city that has suffered two catastrophic fires in the last 15 years, and 30 over the last 90 years.

DESIGN AND PROOF OF WORK FOR THE APPLICATION

Tony Simmons, P.E. has synthesized an electric fire safety protocol tailored to the specific needs of fire-prone Malibu. The engineering documents listed below in our 14-step electric fire safety protocol are required to demonstrate compliance with the generally applicable technical requirements of the following codes: the National Electric Code, the California Electric Code and the Los Angeles County Electric Code. Item (N) below indicates text pertaining to structural engineering requirements that, unlike the electrical safety portions, has been accepted and incorporated by Staff.

Each of the 14 steps below represents a document to be included in each WCF application. Each document must be sealed by a professional engineer pursuant to the California Professional Engineer's Act. Documents A through E are routinely produced by commercially available software such as E-TAP or POWER TOOLS. Documents F through H are produced with CAD programs such as AutoCAD. Document I is required by all codes. Document J is a reaffirmation that all parties understand the service entrance switch is not readily accessible. Documents K, L, and M include information all employers are required to provide to their workers. Document N has been accepted by Staff.

(v) **Electrical and Structural Safety Information**. The following engineering documents prepared under the responsible charge of and sealed by a California licensed professional engineer must be included in the application:

(A) A short circuit and coordination study ("SCCS") calculated pursuant to the IEEE 551-2006: Recommended Practice for Calculating AC Short-Circuit Currents in Industrial and Commercial Power Systems or the latest version of that standard. The study must

demonstrate the protection devices will ensure the equipment enclosure will not be breached. The SCCS must include analysis of Voltage Transient Surges due to contact of conductors of different voltages;

REASON FOR REQUIRING THIS DOCUMENT: This study is required to demonstrate the installation complies with NEC Articles 110.9, 110.10, 110.16 and 240.

WHY THIS STUDY IS IMPORTANT: All electrical equipment will fail. This study ensures that electrical equipment will not catastrophically fail. As an example, electrical conductors may rub together and damage the insulation, allowing excessive current to flow. This study ensures that the fuse or circuit breaker de-energizes the circuit fast enough to prevent arcing or fire. This study could have identified beforehand that meters would catastrophically fail in Stockton in 2015. This study can ensure that a WCF mounted on poles with transmission and distribution circuits, like the pole on the corner of Malibu Canyon Road and Harbor Vista, does not fail like electric meters did in Stockton in 2015.

(B) A one-line diagram of the electrical system;

REASON FOR REQUIRING THIS DOCUMENT: This diagram provides a map of the electrical installation and serves as the primary reference for all the other documents.

WHY THIS DIAGRAM IS IMPORTANT: This document allows less experienced electrical workers to quickly trouble shoot electrical malfunctions and failures and to identify a de-energization point.

(C) Voltage Drop & Load Flow Study;

REASON FOR REQUIRING THIS DOCUMENT: This Study proves the electrical conductors are large enough to ensure that equipment supplied by the electricity flowing through conductors operate within the design range for that item of equipment.

WHY THIS STUDY IS IMPORTANT: If the voltage is too low or too high, electrical equipment may not operate correctly or be damaged.

(D) Load Calculation;

REASON FOR REQUIRING THIS DOCUMENT: The load calculation ensures each item of equipment is sized to safely carry the design load.

WHY THIS DOCUMENT IS IMPORTANT: This document lists all load connected to the electrical system.

(E) Panel Directories;

REASON FOR REQUIRING THIS DOCUMENT: Panel Directories are provided to show workers which switch or breaker de-energizes a specific circuit or piece of equipment.

WHY THIS DOCUMENT IS IMPORTANT: The panel directory is required by Electric Codes so that electrical workers or less experienced individuals can quickly de-energize a circuit in an emergency without a "trial and error" approach.

(F) A plot plan showing the location of the mounting structure including address, or structure designation, or GPS location;

REASON FOR REQUIRING THIS DOCUMENT: This document is necessary to quickly identify the location for prompt emergency and non-emergency response.

WHY THIS DOCUMENT IS IMPORTANT: This document shows the exact location of the WCF and the access route. Power poles are commonly assigned addresses that may be located several hundred feet from the actual location.

(G) A plot plan showing the location of the service disconnecting means;

REASON FOR REQUIRING THIS DOCUMENT: This document is necessary to demonstrate the location of the switch or circuit breaker that separates the customer electrical system from the utility electrical system. This is commonly called the "main switch" or the "main circuit breaker".

WHY THIS DOCUMENT IS IMPORTANT: A WCF has been proposed on a streetlight pole on Cross Creek Road. The WCF is powered from one electric service. The streetlight is powered from a separate electric service. In order to suppress a fire, the power to the streetlight and the power to the WCF must both be de-energized. This plan shows both de-energization points. Service disconnects for streetlights may be several hundred feet away on a different street.

(H) An elevation drawing of the equipment and the service disconnecting means;

REASON FOR REQUIRING THIS DOCUMENT: This drawing shows how the equipment will look once installed. It is critical to ensure the workspace has adequate room to operate safely.

WHY THIS DOCUMENT IS IMPORTANT: Performing work on electrical equipment is hazardous. Workers are entitled to sufficient room to safely work and to escape if an arc develops.

(I) A demonstration there will be signage as required by the California Electric Code or the Los Angeles County Fire Department Chief or his or her designee;

REASON FOR REQUIRING THIS DOCUMENT: The CEC requires that electric equipment be labeled.

WHY THIS DOCUMENT IS IMPORTANT: This is necessary to ensure that first responders or electrical workers safely de-energize the correct equipment.

(J) A demonstration the service disconnecting means shall be mounted at an elevation determined by the Los Angeles County Fire Chief or his or her designee in conjunction with the electric utility;

REASON FOR REQUIRING THIS DOCUMENT: The CEC specifies that the service disconnecting means be readily accessible, which generally means operatable without a ladder. To prevent vandalism of communication systems in public right of ways, the service disconnecting means may be mounted out of reach from the ground.

WHY THIS DOCUMENT IS IMPORTANT: To prevent casual vandalism, the service disconnect may be mounted at a height not reachable from ground level.

(K) A demonstration there will be instructions for deenergizing the equipment by First Responders.

REASON FOR REQUIRING THIS DOCUMENT: Certain electric equipment must be de-energized in a specific sequence to ensure safety.

WHY THIS DOCUMENT IS IMPORTANT: Certain electrical equipment can create an additional hazard if de-energized in the incorrect sequences.

(L) A list of toxic substances that may develop during arcing or fire that may impede fire suppression efforts;

REASON FOR REQUIRING THIS DOCUMENT: The intense heat of an electrical arc may turn non-hazardous substances into hazardous substances. Special protective equipment may be required.

WHY THIS DOCUMENT IS IMPORTANT: Electric arcs instantly reach temperatures of thousands of degrees. Normally non-hazardous material may become hazards. Metals may vaporize and damage lungs.

(M) A list of hazards that may develop during arcing or fire that may impede fire suppression efforts;

REASON FOR REQUIRING THIS DOCUMENT: Arcing or fire may create a pressure wave that can imperil life, health and property.

WHY THIS DOCUMENT IS IMPORTANT: Electric arcing can vaporize copper or aluminum. Copper expands 67,000 times when converted from solid to vapor, which can cause an air blast that throws an individual several feet with fatal force.

(N) Structural Safety Information. The structural/civil engineering documents as recommended by a California licensed professional civil or structural engineer employed by Center for Municipal Solutions.

NOTE: The proposed ordinance includes a standard recommended by APCO/ANSI. This issue has been adequately addressed in the documents provided by Staff.

Every draft we provided to Staff included the 14 documents listed above. As stated, each step represents a diagram, design schematic, or list of potentially hazardous substances that must be signed off on by a professional engineer as required in our fire safety and structural engineering protocol. Staff has persistently removed the protocol, with the notable exception of structural engineering. We do not know why.

FIRE PREVENTION LANGUAGE TAKEN FROM ENCINITAS & SEBASTOPOL SMALL CELL ORDINANCES

The following language was offered to Staff, having been taken from ordinances previously passed in Sebastopol and Encinitas, California. Those cities' Small Cell Ordinances expanded on fire safety language beyond basic adherence to local fire codes. Susan Foster contributed to writing the fire safety portion of the Encinitas Small Cell Ordinance passed initially in 2019 and amended in 2020. The intent of this language was to meet the needs imposed upon each city by the proliferation of small cells and the proximity of these electrical devices for the first time so close to residences, schools, hospitals, playgrounds, daycare centers and parks. Malibu Staff removed this language from the drafts provided by the Community.

APPLICATION AND REVIEW PROCEDURES

Fire Department Review. After submittal by the applicant, the Director shall transmit the entire application packet to the Fire Prevention Division. The Fire Chief (or his or her designee) shall review the application for compliance with objective health and safety standards related to fire hazards. The Fire Chief shall inform the Director in writing of its conclusions and any recommended conditions for public health and safety. Review by the Fire Prevention Division may reasonably require additional processing time, including potentially exceeding FCC Shot Clock timelines if necessary. The Fire Chief (or his or her designee) may select and retain an independent consultant with expertise and/or specialized training in fire safety and fire hazard mitigation and prevention satisfactory to the Fire Chief in connection with any permit application. The Fire Chief may request independent consultant review on any matter committed to Fire Department review or approval. Subject to applicable law, in the event that the Fire Chief elects to retain an independent consultant in connection with any permit application, the applicant shall be responsible for the reasonable costs in connection with the services provided,

which may include without limitation any costs incurred by the independent consultant to attend and participate in any meetings or hearings. The same procedures for fee deposits, cost reimbursements and refunds to the applicant as described above shall be applicable to independent consultant review required by the Fire Chief.

CONDITIONS OF APPROVAL

Safety Hazard Protocols. If the Fire Chief (or his or her designee) or Board of Chiefs of the Dispatch Joint Powers Authority finds good cause to believe that the facility (including, without limitation, its accessory equipment, antenna and/or base station) presents a fire risk, electrical hazard or other immediate threat to public health and safety in violation of any applicable law, such officials may order the facility to be shut down and powered off until such time as the fire risk or electrical hazard has been mitigated. Any mitigations required shall be at the permittee's sole cost and expense.

Continued Monitoring. The permittee's Registered Engineer shall certify in writing continued compliance with the safety standards of this policy on or before January 30th of each calendar year. The Fire Chief will continue to monitor the safety of wireless facilities in the City and publish a yearly review of fire safety considerations regarding potential risks posed by electrical components of new technologies, the presence of numerous small cell wireless facilities in the ROW and any fire events or near-miss events related to wireless facilities.

Oversight Authority. The Fire Chief, in his or her discretion, may issue written fire safety performance directives that shall apply to all existing permits within the scope of such directives and shall be considered as though incorporated into such permits. All permittees shall be required to comply with such directives at the permittee's sole cost and expense.

Fire Investigations.

(i) The Fire Chief shall receive and investigate any credible fire safety complaint made by a resident of the City regarding a wireless facility in the City. Cost of such investigation shall be borne by the permittee. Permittees shall also inform the Fire Chief in writing within one business day of any fire or near-ignition event at any facility or replacement of any facility component in connection with any malfunction pertaining to excess heat, arcing or discharged current. (ii) The Fire Chief shall further investigate any fire in or around the vicinity of a small cell wireless facility. If the conclusion of the investigation is that any facility component is at fault, the Fire Chief shall immediately notify the Malibu City Council of his/her findings, and the facility at issue shall be de-energized until such time as the permittee provides assurances or undertakes precautions satisfactory to the Fire Chief that such event or similar event will not reoccur. In the event that no such assurance is received, and the Fire Chief has good cause to believe that such

failure to comply constitutes a threat to health or safety, permit revocation shall be initiated by the Director.

DESIGN STANDARDS

Electric Meters. Small cells and other infrastructure deployments shall use flat-rate electric service or other method that obviates the need for a separate above-grade electric meter. If flat-rate service is not available, applicants may install a shrouded "smart meter" that shall not exceed the width of the pole provided that such smart meter shall be placed at least 10 feet above ground level. If the proposed project involves a ground-mounted equipment cabinet, an electric meter may be integrated with and recessed into the cabinet, but the Director shall not approve a separate ground-mounted electric meter pedestal unless (1) the separate ground-mounted meter pedestal would be placed off the sidewalk and (2) the applicant's Registered Engineer demonstrates with clear and convincing evidence that all other alternatives for the electric meter are technically infeasible.

Fire Safety Standards.

All wireless facilities shall include:

1) a power shut off readily accessible to fire service personnel, such as by means of rapid entry Knox or similar type systems installed as required by the Fire Chief, upon arrival at the scene of a fire and/or anticipated power surge due to power being turned off or on for any reason;

(2) surge protection devices capable of mitigating a direct or partial direct lightning discharge;

(3) surge protection devices capable of mitigating significant electrical disturbances that may enter the facility via conductive cables;

(4) at least one-hour fire resistant interior surfaces to be used in the composition of all structures and

(5) monitored automatic fire notification and extinguishing systems for all wireless facilities approved by the Fire Chief.

LEARN FROM PAST MISTAKES

The 14 documents must be included because past failures to employ them caused mistakes that put people and their homes in harm's way.

Four of the six tragedies below occurred in California. The California Public Utilities Commission (CPUC) has deferred to the utilities to have independent engineering review

performed. In other words, the utilities have been policing themselves. The utilities have been remiss in overall engineering design as demonstrated by the following:

- In 2007, the Malibu Canyon Fire started when three Southern California Edison power poles overloaded with wireless transceivers from Verizon, AT&T, Sprint (now T-Mobile) and NextG (now Crown Castle), in violation of state regulations, snapped in Santa Ana winds, igniting the tall grass at the base of the power poles. Southern California Edison (SCE) agreed to pay $37 million. AT&T, Verizon and Sprint shared equal parts in a $12 million fine. NextG was fined $14.5 million. All five parties were accused by the CPUC of attempting to mislead fire investigators.
- In 2015, nearly 5000 PG&E smart meters exploded and caused over 80 fires when a transmission line contacted a distribution line, sending a surge through the city that exceeded the smart meters' capacity.
- In Canada and the US between 2012 and 2015, 17 utilities removed 790,000 Sensus smart meters as a safety precaution because of a fire hazard.
- In 2018, the Woolsey Fire was started by utility owned equipment, including a telecommunications wire, that led to the most destructive fire in Malibu in the last 100 years. It burned over 400 homes, killing two people in Malibu, and cost over $6 billion.
- In June 2020, the head of PG&E pled guilty to 84 counts of manslaughter in the deaths of residents caused by the 2018 Camp Fire in Paradise, California. A nearly 100-year-old electrical transmission line owned and operated by PG&E was identified as the cause of the Camp Fire.
- In February 2021, the electric grid in Texas collapsed because electricity and natural gas providers had not winterized their equipment despite warnings 10 years earlier. Thousands of homes were damaged due to water leaks caused by freezing pipes, and so far, 69 deaths have been attributed to the energy grid collapse. Damages are estimated at $18 billion.

We believe a higher level of professionalism and a coming together of multiple disciplines will enhance the chances for a less hazardous outcome as largely untested small cell technology exponentially increases within Malibu's city limits.

WIRELESS FIRES ARE ELECTRICAL FIRES & THEY DO HAPPEN

Three fire officials, including Battalion Chief Drew Smith, recently stated they have not specifically fought 5G tower fires and claimed data is not available on 5G tower fires. It is early for data to be available on 5G cell tower fires and it is worth noting that no agency or industry in the United States, except those who have done so on a private basis, has kept track of cell tower fires from the installation of the first cell tower to the present. Yet proof of electrical fires in cell towers after the 1990s is available. This evidence has been collected in media reports and by some firefighters who have personal records and photographs; some have willingly shared that information. Additionally, we have obtained fire incident reports on cell tower fires around the country and confirmed arcing as a frequent heat source and "electrical" as a frequent cause.

Thanks to the pioneering work of retired Los Alamos Laboratory physicist Dr. David Stupin, we have a reasonable sense of how often cell tower fires were occurring up to the point where he

stopped keeping statistics in 2015. Dr. Stupin's research led him to believe that approximately one cell tower fire happens every month somewhere in the United States. The majority occurred because of electrical malfunction or because there was a deficiency of structural integrity and the collapse itself triggered a fire. We now face an exponential increase in small cell WCFs in the US. The CTIA is the telecommunications industry lobbying entity. They recently commissioned a study focusing on the increase in small cells in the United States. From the CTIA website:

> "The Accenture analysis commissioned by CTIA also found that the United States will see a **550% rise in small cells by this year**, underscoring the timeliness of the FCC's action to jumpstart broadband investment. Small cell deployments will escalate rapidly from roughly 13,000 deployed in 2017 to over 800,000 cumulatively deployed by 2026, according to the analysis." [2018]

We urge you not to wait for the data on 5G cell tower fires before protecting Malibu from what we consider to be an inevitable increase in cell tower fire risks. If the industry has not been keeping track of cell tower fires during the last four generations of wireless, there is no foundation on which to place our hope that they will keep track of 5G cell tower fires. We choose to act with the knowledge of how electrical devices fail, and the fact there is nothing about small cells – the 5th generation of wireless that is being brought into our communities in greater numbers and in closer proximity to people – that can lead us to any conclusion other than the fact the risk of wireless fires in Malibu is increasing with the installation of every small cell.

From the December 16, 2020, Community Meeting, we feel the impression was left, based upon statements by fire officials, that 5G towers are not fire risks. Yet for fire officials of the Malibu section of the Los Angeles County Fire Department to state they have not fought 5G fires does not mean 5G tower fires do not exist. 5G WCFs *are* fire risks in the same way that 2G, 3G, 4G WCFs are fire risks. They are electrical devices. They will fail. Our goal is to put the WCFs through no more engineering rigor than would be required of the signage and electrical lighting in front of Malibu restaurants, gas stations and other commercial establishments in hopes of catching design flaws that could eventually result in fire. And if they do result in fire, we want the diagrams in place with the city of Malibu to show the First Responders the most pertinent information with respect to design features and chemicals involved so that our First Responders can respond as expeditiously and safely as possible.

FIRE RISKS WITH WIRELESS COMMUNICATION FACILITIES

The 2015 Stockton, CA fires (multiple homes) were caused by smart meters used to measure electric use on the sides of homes. Smart/AMI meters may be deficient in suppressing transients/surges and the catastrophic failure of smart meters to handle a massive surge in the City of Stockton demonstrates that electronics close to the home, which many WCFs are and will be in the future, may pose a threat to life, health and property if not screened initially through our recommended Short Circuit and Coordination Study (SCCS). What happened in Stockton can happen in Malibu. If the utility pole on the corner of Malibu Canyon Road and Harbor Vista is hit by a car, and the transmission line contacts the distribution line, we could expect the electric meter and possibly the WCF to catastrophically fail. It would be necessary to de-energize the transmission line and thereby de-energize the area from City Hall and Cross Creek Road to

Pepperdine and beyond. Using the Coordination Study will make it clear what the appropriate fuse size should be. If the WCF is utilizing the appropriate fuse size, the fuse will instantly de-energize the circuit and prevent catastrophic failure.

For metered WCFs, SCE uses electronic meters that may have the same susceptibility as the meters in Stockton. Metered wireless facilities must go through the Community's electric fire safety protocol to determine if they have adequate surge protection against the type of fault that occurred in Stockton.

Lightning strikes can contain more energy than the electrical mishap that occurred in Stockton. California is experiencing more lightning strikes due to the evolving climate. Therefore, electrical installations in Malibu must mitigate the increased frequency of lightning.

The January 28, 2019, edition of The Los Angeles Times reported that California utility equipment sparked more than 2,000 fires in over a three-year period. Cal Fire determined 17 of 21 California fires in 2018 were attributed to pole issues. The deadly Campfire was confirmed to be started by power lines and pole loading. In order to accommodate the newest wireless facilities, companies like Verizon are requiring an increase of pole height by 20-25% (adding 10-ft extension onto 40-ft or 50-ft pole) significantly lengthening the pole while decreasing the force of wind required to topple a pole.

No community outside Paradise, California has been more devastated by wildfire than Malibu. The overloading of three SCE utility poles by four different telecommunications carriers sparked the Malibu Canyon Fire in 2007 and in November 2018, a downed telecommunications lashing wire ignited the Woolsey Fire, forever scarring Malibu by taking out over 400 homes and costing over $6 billion. With the exponential increase of WCFs and the administrative exemptions offered to telecom, our concern is that this problem will increase rather than decrease. Thus, electric fire safety protocol and structural site hardening are essential for Malibu.

EXAMPLES OF WCF FIRES

There is a common misperception that WCF fires are primarily caused by arson. While there are documented cases of arson in 2020 related to misinformation about 5G and COVID-19, these cases were a short-term phenomenon. The examples below are representative of WCF fires that have occurred through the years as documented by the news media. Electrical malfunction and welding on WCFs for routine maintenance are the cause of the vast majority of cell tower fires. The examples below are representative of the genuine risks that could be facing Malibu.

> **July 2013 – Besalem, Pennsylvania:** An AT&T cell tower fire was sparked when welders were working 70 feet in the air on a tower; sparks set off an intense fire ten feet above them. They tried to put it out but ended up having to race down to get help. The fire spread quickly and left the 10-story tower leaning over precariously. Initially, firefighters could not throw water on the fire because electricity was still surging through the tower and it took utility crews longer than expected to get it turned off. Essentially the fire was allowed to burn itself out.

July 2014 – Columbus, Ohio: Black smoke poured from a light pole with a WCF in Grandview Heights around 10:00 AM. The pole held lights for the football field as well as cell phone equipment. Streets were blocked off while emergency crews were on the scene. Homes within a one-block radius of the school were evacuated. Suspected electrical fire.

September 2014 – Thurston, Oregon: A cell tower fire at Thurston High School sent up a smoky plume above the Colts sport field. The cause of this fire was undetermined but Battalion Chief Marcus Lay explained, referring to the fire, that "It is contained and basically under control, but we have to wait until Springfield Utility Board gets here to get the power completely shut off to finish extinguishing it." Cause undetermined.

June 26, 2020 – Hanover, Virginia: A cell tower caught on fire overnight; a heavy storm with lightning moved through the area shortly before the call. Hanover Fire was able to extinguish flames on top of a cell phone tower. When they arrived around 11:15 PM, they saw a cell tower completely covered in flames. The fire was safely put out and officials believe that it was an accidental fire as the result of electrical/mechanical issues.

October 2020 – Irvine, California: Silverado Fire Southern California Edison Co. may seek contributions from T-Mobile as it is suspected the company's lashing wire touched an adjacent power line and sparked the fire. On October 26 SCE told the CPUC that a lashing wire attached to a telecommunications line running under the utility's 12-kV power line may have ignited the wildfire. The blaze seriously injured two firefighters and scorched more than 12,000 acres in Orange County and forced the evacuation of over 60,000 people, according to the California Department of Forestry and Fire Protection. In general, multiple companies can use the same utility poles, but each is responsible for managing its own equipment. Utilities are supposed to regularly look for any threats from telecom equipment installed on shared poles. This is not a foolproof system of governance.

November 2020 – Lapeer, Michigan: Wiring in a 197-foot-tall cell tower caught fire shortly after 9 p.m. Flames were visible shooting from the top of the hollow tower, while near the base of the structure the interior fire was so hot the metal glowed orange and pink. As a result of the fire that weakened the strength of the tower, there was a visible lean to the structure — the height of a 15-story building. The tower was dismantled and replaced.
March 2021 – Chula Vista, California: An AT&T cell tower partially concealed in a light fixture around a track at Otay Ranch High School burst into flames at 7:30 PM on a Tuesday evening. The Fire Incident Report was obtained through a public records request. The area of origin was within the equipment; the heat source was "electrical arcing". When the fire department arrived the 100-ft pole appeared to have an internal fire that traveled up the pole to the cell phone equipment and stadium lighting at the top of the pole. The fire department requested utility SDG&E to respond to the location. Firefighters maintained a safe distance until they could verify all power supply to the pole had been secured. As they were waiting for the representative from SDG&E to arrive to confirm the power had been cut, the heat of the fire due to arcing caused the steel pole to become molten plasma. It collapsed onto the bleachers near the football field, burning the track and destroying the bleachers. Once the rep from SDG&E arrived on scene and verified the power had been secured and that there was no electrical hazard, firefighters extinguish the fire using a water and foam combination.

WHY DOES 5G INFRASTRUCTURE POSE A GREATER FIRE RISK TO RESIDENTS

It is not the frequency of cell tower fires that concerns us the most. It is the severity of what a single cell tower fire can do. The biggest risk is that WCFs have been brought much closer to local populations and those installations are much more densely situated. Every electrical device including every WCF must be deenergized before a fire can be fought. On a good day that can happen in 10 minutes. Some cities find that it is 30 minutes or more before the electric company cuts the power. If the firefighters fight the fire before the tower is deenergized, they can be electrocuted. A lightning strike is a type of transient event that may lead to WCF catastrophic failure. Malibu residents will recall in May of 2019, just before Memorial Day weekend, several beaches were closed in Malibu because of a lightning storm that created unsafe conditions. **Thus, the placement of WCFs must allow time and space for escape because a fire originating in a WCF must not be fought by residents or by firefighters until SCE has turned off the power. This is why we propose separation and setback requirements as strategies to mitigate risk to residents**.

One firefighter who is accustomed to fighting fires under Santa Ana conditions in California understood the extreme risk posed by a cell tower fire near a populated area. He described how he would fight such a fire:

> *"If the fire involves energized equipment, do not put water on it. Use water only to extinguish anything like trees, grass, vegetation, etc. that it may spread to, and then use water in short bursts if it's adjacent to the pole. Call the utility company immediately so they can de-energize. Keep people back for 2 spans in either direction and make sure all personnel and equipment stay out from under the power lines. Focus on public safety and exposure protection until it's confirmed that the power has been shut off."*

We firmly believe the greater the distance between WCFs, the more likely an individual(s) would be able to escape homes, schools, hospitals, nursing homes. Distance between towers and from property lines will be critical to escape. Distance from WCFs and property lines may mean the difference between life and death. Due to the length of time it can take to cut the electricity and subsequently fight a fire, particularly one that has spread, we feel it is not worth the very real potential for loss of life if cell towers, small cells or macro towers, are located within residential neighborhoods. Additionally, care should be taken to keep cell towers away from roots of entrance and egress for neighborhoods. The same caution should be taken with densely populated facilities like schools, daycare centers and special zones as designated by the city.

The scars from the 2007 Malibu Canyon Fire and the 2018 Woolsey Fire are still evident on the land. The human toll appears greater. The residents speak openly about PTSD, particularly on those days when the winds blow as they did during the Malibu Canyon Fire and the Woolsey Fire. The winds remind residents of the Santa Anas that carried burning embers sideways, whipped flames such that they consumed many residents' homes, blocked exit routes out of the city and literally terrorized the whole of Malibu – the land, the air, and most of all the residents, their animals and wildlife.

FALL ZONE: We would like to add that we believe expansion of the fall zone should be carefully considered. It must be at least the height of the tower with 50% or at least 25% added onto that because of the falling debris field.

UNIQUE FIRE RISKS TO MALIBU

VERY HIGH FIRE HAZARD SEVERITY ZONE: The City of Malibu is designated as a Very High Fire Hazard Severity Zone. The City was devastated by major fires in 2007 and 2018 due to power pole failures. In each instance the utility structures supported wireless communications facilities that either initiated or significantly contributed to the ignition. The 2018 Woolsey Fire consumed over 96,000 acres, destroyed at least 1,643 structures, killed three people, and prompted the evacuation of more than 295,000 people. It was one of several fires in California that ignited on the same day. Malibu has still not recovered. The 2007 fire burned 3,836 acres, 36 vehicles and 14 structures, including Castle Kashan and the Malibu Presbyterian Church, and damaged 19 other structures. It is essential that wireless communications facilities be engineered to prevent fire and withstand fire events as much as possible, and at least in a manner comparable to other commercial facilities with extensive, complicated electronics and wiring, as well as flammable, sometimes hazardous and toxic, materials on site.

SEISMICALLY ACTIVE: Malibu is geographically defined by the Santa Monica Mountains to the North, the Pacific Ocean to the South, the Santa Monica Fault to the East and Ventura County to the West. Malibu is a seismically active area with five active faults in the general vicinity. These nearby faults include Malibu Coast Fault, Las Flores Thrust Fault, Santa Monica Fault, Palos Verdes Hills Fault, and the Newport-Inglewood Fault. There are also potential seismic hazards and soil hazards in Malibu. Seismically-induced soil hazards include liquefaction – a temporary, but substantial loss of strength in granular solids, such as sand, silt, and gravel, usually occurring during or after a major earthquake. Seismic activity can also induce subsidence and settlement. Subsidence is deep settlement due to the withdrawal of fluid (oil, natural gas, or water). Seismically-induced settlement occurs in loose to medium dense unconsolidated soil above groundwater. These soils compress or settle with seismic shaking. Settlement can also result from human activities including improperly placed artificial fill, and/or structures built on bedrock or soil with differential settlement rates. There is also risk from expansive soils such as clay; it can swell when wetted and shrink when dried. Wetting can occur from rainfall, groundwater fluctuations, lawn watering, broken water or sewer lines. Expansive soils can result in cracks in foundations. Expansive soils located on slopes can cause slope failure. Unstable soils can produce landslides, debris flows, and rock falls. Hill slopes, which occur in Malibu, have a tendency to fail. Unless engineered properly, development in hillside areas tends to increase the potential for slope failure.

MARINE ENVIRONMENT: Malibu is a marine environment. Thus, there are accelerated corrosion issues due to the combination of increased moisture and salt in the air. Metal parts within wireless facilities fail faster in this corrosive environment. This corrosion may adversely affect the structural and electrical integrity of a wireless facility. In addition, corrosion may pose a risk to internal parts which, if corroded and not replaced on a very conservative maintenance schedule, may become fire risks themselves. Therefore, the failure rate of wireless facilities is higher and the need for stricter standards in the very beginning is essential.

GREATER NEED FOR STRUCTURAL INTEGRITY: Because of seismic and soil displacement and/or settlement risks as well as the potential for fires, heavy rains, mudslides and landslides, all wireless facility sites must be built to the standards of ANSI/APCO Public Safety Grade Site Hardening Requirements. This standard represents public safety requirements regarding various characteristics to make mission critical communications network sites sufficiently robust to meet the service availability requirements of public safety. These safety standards can be found in APCO ANSI 2.106.1–2019, or their replacements. Collapsed WCFs are a cause of multiple wireless facility fires. Structural integrity is paramount to keeping Malibu safe from fire started by collapsed wireless equipment.

This confluence of geographic and climate characteristics means that Malibu needs greater fire safety regulations than non-marine, low fire hazard, seismically stable regions. Malibu is the first local government to be informed that the exemption for telecom utilities render the National Electric Code, the California Electric Code, and the Los Angeles County Electrical Code insufficient to protect the public from the electrical risks of WCFs. Malibu can protect itself and its residents by adopting the safety provisions we propose.

WIRELESS CELLULAR FACILITIES AS CRITICAL INFRASTRUCTURE

This final subsection recognizes that the Federal government and state public safety organizations have declared that wireless networks are critical infrastructure for national security and public safety purposes – often at the urging of the wireless industry. Critical infrastructure must be protected too, through appropriate fire and structural safety requirements. We are not aware of any evidence indicating telecom objects to a stronger electric safety protocol. If such an objection exists, it should be made on the record and the basis fully explained.

Cell towers are considered critical infrastructure to maintain communication during times of natural and man-made disasters. Pandemics are one example, as illustrated by the timing of the US Department of Homeland Security, Cybersecurity & Infrastructure Security Agency's (CISA) March 28, 2020 Guidance on the Essential Critical Infrastructure Workforce: Ensuring Community and National Resilience in COVID-19 Response Version 3.0 (updated on April 17, 2020), available at https://www.cisa.gov/sites/default/files/publications/Version_3.0_CISA_Guidance_on_Essential_Critical_Infrastructure_Workers_1.pdf. The Wireless Infrastructure Association applauded the designation. See https://wia.org/wia-applauds-dhs-action-for-access-to-critical-infrastructure/.

In Malibu, we are simply asking telecommunications carriers to treat their facilities like the essential infrastructure that it is. Anything less is counterintuitive and ill-advised.

Further, even before the DHS guidance the Association of Public-Safety Communications Officials (APCO) International received final approval from the American National Standards Institute (ANSI) in 2019 for an American National Standard (ANS) that identifies hardening requirements for public safety grade sites. In other words, structural engineering for WCF sites has gone from the concept practiced by some to a standard that should be followed by all.

APCO ANSI 2.106.1-2019 was developed by the Public Safety Grade Site Hardening Working Group. This standard was derived from the 2014 National Public Safety Telecommunications Council (NPSTC) report (Chapter 9) and the work of the original APCO Broadband Committee. The document is intended to assist public-safety communications network builders with the guidelines necessary to build hardened public safety grade networks.

With five (5) active earthquake faults running through Malibu, this is a welcome standard. It reads, in part:

> This standard represents public safety requirements regarding various characteristics to make mission critical communications network sites sufficiently robust to meet the service availability requirements of public safety. In other words, what it takes to make network sites "public safety grade" or the extent to which they are "hardened."
>
> The document is intended to assist public safety communications network builders with the guidelines necessary to build hardened public safety grade networks. This document addresses hardening for wireless transmission and reception sites. Specifically, it addresses the hardening requirements to provide the appropriate site conditions and characteristics for wireless system electronics (e.g., transmitters and receivers) and wireless passive components (e.g., coaxial cables and antennas).
>
> These sites need to withstand the onslaught of natural or manmade conditions and consider the distinct requirements for different geographic locations of the United States, including their likelihood to be subject to severe storms, earthquakes, tornadoes, and other disasters.

In the face of increasing federal emphasis on WCFs as essential to Public Safety and no record of opposition from the telecom industry, we question why anyone would be reluctant about embracing our safety protocol and application content requirements.

Application Requirements Regarding Fire Prevention and Management

Los Angeles County requires:
(v) Electrical and Structural Safety Information. The following engineering documents prepared under the responsible charge of and sealed by a California licensed professional engineer must be included in the application:
(A) A short circuit and coordination study ("SCCS") calculated pursuant to the IEEE 551-2006: Recommended Practice for Calculating AC Short-Circuit Currents in Industrial and Commercial Power Systems or the latest version of that standard. The study must demonstrate the protection devices will ensure the equipment enclosure will not be breached. The SCCS must include analysis of Voltage Transient Surges due to contact of conductors of different voltages;
(B) A one-line diagram of the electrical system;
(C) Voltage Drop & Load Flow Study;
(D) Load Calculation;
(E) Panel Directories;
(F) A plot plan showing the location of the mounting structure including address, or structure designation, or GPS location;
(G) A plot plan showing the location of the service disconnecting means;
(H) An elevation drawing of the equipment and the service disconnecting means;

(I) A demonstration there will be signage as required by the California Electric Code or the Los Angeles County Fire Department Chief or his or her designee;

(J) A demonstration the service disconnecting means shall be mounted at an elevation determined by the Los Angeles County Fire Chief or his or her designee in conjunction the electric utility;

(K) A demonstration there will be instructions for deenergizing the equipment by First Responders.

(L) A list of toxic substances that may develop during arcing or fire that may impede fire suppression efforts;

(M) A list of hazards that may develop during arcing or fire that may impede fire suppression efforts;

(N) Structural Safety Information. The structural/civil engineering documents as recommended by a California licensed professional civil or structural engineer. The standard recommended by APCO/ANSI Public Safety Grade Site Hardening Requirements – APCO ANS 2.106.1-2019 is required by Federal law and the County of Los Angeles. https://www.apcointl.org/~documents/standard/21061-2019-psg-site-hardening/?layout=default

Further Important Fire Considerations

- The final diagrams submitted after approval and before construction and operation must contain enough detail for the building official and planning department to reaffirm safety compliance.
- The County of Los Angeles must impose on each permittee an ongoing duty to maintain safety compliance for so long as the facility is in operation.
- Cell towers must be set back from all entrances and exits to residential neighborhoods and schools as well as daycare centers because of the fire risk inherent in telecommunications equipment, including but not limited to the fact that cell towers invite lightning strikes. Even when proper lightning mitigation systems are installed, they cannot mitigate the effects of ground potential rise. Because telecommunications lines and electric lines are often bound together throughout neighborhoods and nearby buildings, the potential for insufficient mitigation of a lightning strike can trigger electrical fires within homes and other structures such as schools and daycare centers within 300 – 500 feet. Because cell tower fires are electrical fires, these fires cannot be fought through conventional means and therefore the power must be cut. Because this takes between 10 and 60 minutes, residents and children need time to escape.

EXHIBIT 10

PROTECTING LA COUNTY'S FUTURE:

HOW FIRE RISKS FROM TELECOMMUNICATIONS EQUIPMENT, CLIMATE CHALLENGES & A DANGEROUS SHIFT AWAY FROM ENVIRONMENTAL REVIEW THREATEN LOS ANGELES COUNTY'S FUTURE

Susan Foster, Co-Founder
California Fires and Firefighters

November 15, 2022

INTRODUCTION TO TELECOM FIRE RISKS

Cell towers and related telecommunications equipment can cause wildfires. Each cell tower is an electrical device. When electrical devices fail, electrical fires can be triggered. Cell tower fires cannot be extinguished through conventional means. Anyone putting water on a cell tower fire before the electricity is cut, which can take up to 60 minutes,[1] will be electrocuted. Imagine a cell tower fire in a neighborhood or next to a school in the midst of a Santa Ana windstorm and there is nothing you can do until Southern California Edison (SCE) cuts the power.

Our team working in Malibu – telecommunication's attorney W. Scott McCollough, electrical engineer Tony Simmons, P.E., and Susan Foster, Fire & Utility Consultant and Honorary Firefighter with the San Diego Fire Department – linked four major fires to telecommunications equipment within the last 15 years in Southern California alone, costing well over $6 billion in damages. These fires will be evaluated within this paper but in brief they are the Guejito Fire (2007) in San Diego which merged into the explosive Witch Creek Fire, Malibu Canyon Fire (2007), Woolsey Fire in Malibu & LA County (2018) in Supervisor Kuehl's district which burned for one month, took the lives of three people trying to escape, and the Silverado Fire in Irvine (2020). Please note three of those fires were in or adjacent to LA County.

Though these fires are always well reported in the media at the time, fire investigations can take years and very often the telecommunication industry's role in the initiation of fires is proven years down the road, so the general public and even local leaders may have no awareness of the role telecommunications plays in the initiation of these fires. The fault most often lies with telecommunications' failures in electrical engineering, structural safety, and maintenance; these faults are often understated and/or covered up.[2]

According to the Federal Communications Commission (FCC), safety belongs to the locality to regulate.[3] [4] That includes safety setbacks. Because of the risk of fire due to telecommunications

[1] "Protecting Malibu's Future: Preventing Electrical Fires in Cell Towers by Introducing Enhanced But Generally Accepted Engineering Design Rigor and Adequate Proof of Work in the Application," Susan Foster & Tony Simmons, P. E., Updated May 8, 2022 by S. Foster. Attachment 1 Community Memo, Memorandum from W. Scott McCollough to Malibu City Council, "Response to Planning Commission Recommendation and Staff Draft Conforming Provisions," April 8, 2021.

[2] Ibid.

[3] 2014 Infrastructure Order ¶ 202.

[4] 2020 Section 6409 Dec R and NPRM ¶43.

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equipment, Los Angeles County leaders would be well advised to keep cell towers out of residential areas to allow residents time to escape in the event of a cell tower fire. The same caution should be used for school and daycare facilities, and in all areas where a vulnerable portion of the population has limited access to escape, which may include transportation shortcomings, and limited time in which to escape.

The use of ministerial permits should be discouraged because then electrical, structural and fire safety will be left unchecked, and the telecommunications industry will be policing telecom. We have seen the results of that with over $6 billion worth of damage in the last 15 years alone, thousands of homes lost or damaged, dozens of casualties, lives disrupted, and the environment and wildlife threatened.

It is particularly germane to note that in the Malibu Canyon Fire, the California Public Utilities Commission (CPUC) accused all parties the CPUC found to be negligent in the initiation of the Malibu Canyon Fire to have impeded the fire investigation. These parties included: Southern California Edison (SCE), AT&T, Verizon, Sprint (now T-Mobile) and NextG, now owned by Crown Castle. Because AT&T, Verizon and Sprint admitted to their participation in the initiation of the fire without having to litigate, the CPUC and the Safety and Enforcement Division (SED) were more critical of and punitive with SCE and NextG.[5] All of these parties conduct business in Los Angeles County and provide telecommunications services and electrical services (SCE) to Los Angeles County.

In addition to the Malibu Canyon Fire, the $6 billion Woolsey Fire was the fault of Southern California Edison's own telecommunications company. Edison impeded the fire investigation; details will be forthcoming in this paper.

It is therefore relevant to ask all parties who participate in the safety of the residents of Los Angeles County if appropriate due diligence is being exercised by the County with respect to telecommunications equipment that already has been permitted or will be permitted in the future in Los Angeles County. If the parties who participated in causing the Malibu Canyon Fire impeded the subsequent fire investigation, what makes the leaders of Los Angeles County have any confidence whatsoever in the telecommunications industry continuing to police their own installation of telecommunications equipment?

Los Angeles County must not rely on inexperienced agencies such as the LA County Public Works Department which has never before dealt with wireless installations being in charge of the small cell buildout, for example. It is indeed possible to accomplish electrical, structural and fire and building code safety inspections with all telecom applications for permits within the constraints of the shot clock, difficult though that may be, by requiring electrical, structural and fire safety code inspections in an application checklist upfront.

If the LA County Planning Department evaluated all incoming Wireless Telecommunications Facility applications according to a posted checklist, and an applicant failed to provide required

[5] DECISION CONDITIONALLY APPROVING THE SOUTHERN CALIFORNIA EDISON COMPANY SETTLEMENT AGREEMENT REGARDING THE MALIBU CANYON FIRE, BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA, Decision 13-09-028 September 19, 2013.

information, the shot clock could be tolled with a written letter to the carrier from the Planning Department. That stops the shot clock until the appropriate information is provided to the County of Los Angeles.

This does not guarantee that all telecommunications fires will be avoided in the future, but it does help reduce future fires by allowing an opportunity to review Wireless Telecommunications Facility designs and placement upfront, and it preserves an essential aspect of due process for the residents of Los Angeles County. Again, for emphasis, safety belongs to the municipality to regulate. Without federal, state, and county code enforcement, the telecommunications industry will be left to police itself. Any and all entities that have established a reputation with the CPUC for failing to cooperate in a fire investigation should not be left to supervise themselves.

Our team's recommendations to the Malibu Planning Commission and the Malibu City Council were accepted and passed unanimously by both bodies. We presented the facts about the Malibu Canyon Fire and the known risks at the time of the Woolsey Fire, both of them telecommunications-initiated in whole or in part, and we presented a plan we had constructed for the appropriate electrical, structural, fire and building code safety to be evaluated at the application stage. That plan is provided in this paper along with additional information that supports the need for the Los Angeles County Planning Department and its requisite safety consultants to review every application according to a very specific application checklist that has safety as its central theme.

We strongly advise against ministerial permits because this upfront evaluation will be omitted with a rubberstamp. To discard safety, and environmental review is an integral part of ensuring safety, as a "solution" to the shot clock requirement is the opposite of what is needed. The more cell towers Los Angeles County permits, the greater the fire risk. More scrutiny is needed with every cell tower that enters Los Angeles County, not less. The shot clock should not be a reason for knowingly adding to Los Angeles County's fire risk. The shot clock simply requires that Los Angeles County hire staff and/or consultants sufficient to effectively and efficiently shift the compliance requirements so that the onus is on the telecom applicants to have completed applications with design requirements upfront when they enter Los Angeles County. This can be accomplished in a reasonable and balanced manner.

For context, let us look at the Malibu Canyon Fire and the Woolsey Fire, and understand why they occurred. For the sake of the residents of Los Angeles County, we implore you to remedy what appears to be a very dangerous direction where Los Angeles County is neglecting safety and neglecting environmental review in favor of expediency and marching to the FCC and telecommunications industry's shot clock. To suggest that environmental review is no longer relevant is astonishing with the challenges faced by changing climate, rising temperatures, a drought with no end in sight, and increased fire risk with every single Wireless Telecommunications Facility permitted in Los Angeles County.

Understanding how these telecommunications fires start may help Los Angeles County appreciate that to turn away from WTF design requirements and scrutiny through use of 1) ministerial permits, and 2) by dismissing environmental review altogether invites an unmitigated

fire risk this County and its inhabitants cannot afford. It is crucial to understand that environmental review includes fire and climate challenges.

First, let us take the Malibu Canyon Fire. The fire occurred in October 2007 when three utility poles fell to the ground during a Santa Ana windstorm. The California Public Utilities Commission (CPUC) approved settlement agreements totaling $51.5 million with Southern California Edison (SCE) and NextG Networks (now owned by Crown Castle) as both punishment and enhancement of public safety moving forward. Again, AT&T, Verizon and Sprint (now T-Mobile) admitted to their part in the fire and thus were fined though not as significantly as SCE and NextG Networks.[6]

The Woolsey Fire started on November 8, 2018. The Ventura County Fire Department received notice of a fire, soon-to-be known as the Woolsey Fire, at the Santa Susana Field Laboratory in the Simi Hills, just south of Simi Valley. The fire ignited at two points simultaneously and these two locations were designated by CalFire as Sites 1 and 2.

To quote directly from INVESTIGATION REPORT OF THE WOOLSEY FIRE: "The messenger wire extended about one quarter mile east to Site 1 between poles number 4650857E and 4557126E; these two poles supported several other communications conductors in addition to an ECS communications conductor from Site 2. Trees in this area had been growing into the communication conductors between these poles and pressing them together. This overgrowth caused the energized messenger wire and its lashing wire to make contact with another messenger wire and its lashing in the same span. The contact between the two sets of wires caused an arc, which partially melted the lashing wires and caused hot fragments of lashing wire to fall into the brush below. These hot metal fragments ignited the brush and started a second fire there at Site 1."[7]

These two brush fires converged as they burned south and became the Woolsey Fire. The Woolsey Fire burn 96,949 acres of land, destroyed 1,643 structures, caused three fatalities, and prompted the evacuation of more than 295,000 people in the area. The total damage to property was estimated to be $6 billion.[8]

The telecommunications role in this fire is as follows: The negligence for the Woolsey Fire was not placed at the feet of one of the telecommunications giants but rather Southern California Edison's own telecommunications backhaul line which was SCE's responsibility to maintain.

The Safety and Enforcement Division (SED) found that on a May 10, 2018 telecommunications inspection of their equipment, an SCE employee failed to assign a priority level to the condition associated with a broken Edison messenger wire and a broken Edison lashing wire. This condition should have been marked as urgent and it was not. The failure to repair

[6] CPUC ENHANCES SAFETY, ISSUES $51.5 MILLION IN PENALTIES AND REMEDIATION AGAINST SCE AND NEXTG FOR MALIBU CANYON FIRE, Docket #: I.09-01-018, Press Release, Sept. 19, 2013.

[7] INVESTIGATION REPORT OF THE WOOLSEY FIRE, SAFETY AND ENFORCEMENT DIVISION ELECTRIC SAFETY AND RELIABILITY BRANCH LOS ANGELES.

[8] Ibid.

telecommunications equipment went unrecognized for six months. Southern California Edison did not contest the SED's findings. In other words, telecommunications equipment belonging to Southern California Edison and a failure to maintain that equipment properly played a significant role in the initiation of the Woolsey Fire.[9]

Just as the CPUC accused all parties in the Malibu Canyon Fire of failing to cooperate fully in the fire investigation, the same failure to cooperate in the Woolsey Fire investigation conducted by the Safety and Enforcement Division (SED) was well-documented.

Wildfires by their very nature are extraordinarily destructive, which makes fire investigation observations at the earliest possible time critical to understanding the events that occurred and finding the cause or causes. Southern California Edison failed to provide a comprehensive set of data and evidence that Safety and Enforcement Division (SED) requested. Edison impeded and prolonged SED's investigation, according to the Fire Investigation Report.[10] Edison's actions prevented SED from reviewing all available information from the point at which the fire had least disturbed the electric facilities.

According to the Report: "The actions of Edison's first responders cannot preemptively be under the direction of Edison counsel. Any notes, reports, or text messages that SED requested would not be generated under the direction of Edison counsel and accordingly should not be subject to attorney-client or work product privilege. For the reasons stated above, SED's investigation determined that Edison is in violation of PU Code § 316 and GO 95, Rule 19 for failing to provide: the list of evidence and records used for Edison's own investigation, as well as photographs, notes, reports, and text messages generated by first responders. In the spirit of full and transparent cooperation with the Commission and its staff, it is imperative that Edison respond to SED data requests with the most comprehensive information available. Without such comprehensive information, SED cannot conduct a thorough investigation, determine the root cause of the incident, expeditiously remedy any issues and prevent future similar incidents from occurring."[11]

Los Angeles County leaders need only look within the geographical boundaries of their responsibilities to understand that Southern California Edison has a history of negligence in electrical safety, structural safety and maintenance of its equipment. It was the reckless disregard for safety by overloading utility poles because it is profitable to do so that triggered the Malibu Canyon Fire. It was a failure by SCE to maintain their telecommunications equipment that contributed to the initiation of the Woolsey Fire, the most destructive fire in California's history up until that point.

To compound SCE's reckless disregard for safety [Malibu Canyon Fire] and the negligence of its existing equipment [Woolsey Fire] with impeding fire investigations that they participated in

[9] [PROPOSED] ADMINISTRATIVE CONSENT ORDER AND AGREEMENT, Issued pursuant to Commission Resolution M-4846 (adopting Commission Enforcement Policy on November 5, 2020), October 21, 2021.

[10] INVESTIGATION REPORT OF THE WOOLSEY FIRE, SAFETY AND ENFORCEMENT DIVISION ELECTRIC SAFETY AND RELIABILITY BRANCH LOS ANGELES.

[11] Ibid.

[Malibu Canyon Fire] or were, in fact, fully responsible for [Woolsey Fire] should immediately shift the calculus for Los Angeles County planners and leaders.

The above facts should compel both planners and leaders to seriously call into question whether Los Angeles County should be trusting SCE and its telecommunications partners with policing themselves by rubberstamping applications through ministerial permits. Furthermore, the above facts should compel both planners and leaders to immediately reconsider allowing a Public Works Department that has never before dealt with wireless applications, permits, notifications or appeals to rollout small cells in front of people's homes and/or under the canopies of highly flammable trees.

The reckless disregard for safety will no longer belong to the utilities alone if environmental review is set aside in favor of bowing to shot clocks when a solution – tolling the shot clock because an application is incomplete – is available.

CLIMATE CHALLENGES COMPOUND TELECOM FIRE RISKS

The fire risk in Los Angeles County is extreme, as it is throughout most of the state. In July 2022 Gov. Gavin Newsom met with lawmakers in Washington DC in an attempt to secure better equipment to battle climate-driven fires that start for a variety of reasons, one of which, telecommunications equipment, is addressed in this paper. Gov. Newsom and Sen. Alex Padilla announced the U.S. Department of Defense will be allocating seven C-130 planes for California for purposes of fighting fires. Newsom announced that seven aircraft are officially on the Defense Department's schedule for 2023, with the expected delivery to be sometime around the end of next summer. The massive military transport planes can be retrofitted and modified to serve multiple purposes, including wildfire suppression.

In spite of the fact California is the most populated state in the nation, and one of the states with the highest fire dangers, California has often had to borrow firefighting aircraft from the federal government, other states and even other countries. [12]

Climate changes compound that fire risk, and the LA County Climate Vulnerability Assessment dated October 2021 is cautionary. Taken directly from the Executive Summary, Los Angeles County leaders were warned in these stark terms:

> "In recent years, LA County has experienced record-breaking high temperatures, prolonged drought, and more intense wildfires. Each unprecedented event strains our communities, directly harming our health, infrastructure, and the natural resources we rely on. Such climate hazards are projected to become increasingly severe and frequent in the coming decades.

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[12] Travis Schlepp, *California to receive 7 firefighting planes from Defense Department, Gov. Newsom says* (KTLA Los Angeles, July 16, 2022).

> "This report, the LA County Climate Vulnerability Assessment (CVA), fulfills a commitment outlined in the Our County Sustainability Plan, identified by stakeholders as a top priority: to assess how people and infrastructure in LA County may be vulnerable to the changing climate. The County's vision of sustainability demands that we work to understand increasingly dangerous threats. High climate vulnerability is generally defined as a combination of increased exposure to climate hazards; high sensitivity, or susceptibility, to negative impacts of exposure; and low adaptive capacity, or ability to manage and recover from exposure." [13]

In his Foreword, Los Angeles County Chief Sustainability Officer Gary Gero addresses the danger in preparing a Climate Vulnerability Assessment such as the one he and colleagues prepared for LA County in that the "projected impacts could be mistaken for established facts of what will happen in the future."

Yet Chief Gero explains the care that has been taken with this report. "In conducting this assessment," the Chief Sustainability Officer offers, "we looked at the best available science on climate projections." The 141-page report includes 246 Endnotes, most of them scientific in nature, as well as Staff Reports, input from the Los Angeles City/County Native American Indian Commission, multiple references to the U.S. Environmental Protection Agency, and papers on wildfires and health, many of them specific to those vulnerable members of the population who are disproportionately impacted.

According to Chief Gero: "The results are frightening but not inevitable. We still have the power to create a safer and healthier future by taking bold and aggressive action to reduce emissions today. And, doing so, we will help clean up our air and water, create good jobs, improve our neighborhoods, and address some of our most intractable environmental justice issues." [14]

The wildfire references were particularly compelling in the Climate Vulnerability Assessment. Wildfires were predicted in 2021 to become larger, more frequent and more destructive – especially in the San Gabriel Mountains where "the wildfire burn area may increase up to 40% by mid-century." [15]

The LA County Climate Vulnerability Assessment goes on to predict: "Although much of the additional destruction will likely occur in unpopulated areas, more than a million housing units in the wildland-urban interface will continue to be at risk. Furthermore, wildfire smoke will continue to affect people across the County, with 40 percent of residents already reporting that they have avoided going outside because of air quality impacts." [16]

The LA County Climate Vulnerability Assessment emphasizes that wildfire also jeopardizes water quality and energy assets serving residents across the County, and it points out several

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[13] LA County Climate Vulnerability Assessment, October 2021, pp 4-5.

[14] Ibid., p. 3.

[15] Ibid., p. 6.

[16] Ibid., p. 6; University of Southern California, Dana and David Dornsife College of Letters, Arts and Sciences, Center for Economic and Social Research. LABarometer: Top 5 Takeaways from The Sustainability and Resilience Report. University of Southern California, Sept. 25, 2020, cesr.usc.edu/sites/default/files/Top5_sustainability. pdf. Accessed Sept. 10, 2021.

areas of particular vulnerability including limited transportation to escape, as well as risk to the last remnants of a culture that must be honored.

With respect to escape, Santa Clarita is highlighted as being at risk of exposure to both extreme heat and wildfire, which has a high proportion of older adults living alone and low transit access.[17] Low transit access can severely threaten anyone's ability to escape the wildfire, but older adults are particularly vulnerable and are thus disproportionately impacted when it comes to the ability to escape.[18]

The Assessment also highlights Native populations as being disproportionately impacted when it comes to events like wildfires. Not only do they add to "historical trauma and ongoing injustice that puts these populations at greater risk of negative impacts, the reduction of the region's natural biodiversity decreases access to traditional foods and culturally significant plants," wildfire can destroy irreplaceable cultural sites and sacred land.[19]

MALIBU'S SOLUTION: ELECTRICAL, STRUCTURAL, FIRE & BUILDING CODE EVALUATIONS AT THE APPLICATION STAGE

Wireless Communications Facility (WCF) proliferation increases the possibility of electrical fires. As such, electrical fire safety became a priority for Malibu, a city that has burned twice at the hands of telecommunications equipment in just the last 15 years alone.

A group of Malibu residents (referred to here as the Community) worked with the city to help minimize Malibu's fire risk from WCF installations. The following is taken directly from the white paper written by our team with a telecommunications attorney, a Professional Engineer (PE), and a Fire & Utility Consultant and Honorary Firefighter with the San Diego Fire Department.:[20]

"This white paper explains the Community's proposed safety design and application content requirements. These proposed requirements are tailored to Wireless Communications Facility installations in areas with dry vegetation, like Malibu. Some of the language was taken from ordinances in Encinitas and Sebastopol, while much of it is new. The new language is necessary because of the recent discovery that national, state and local electrical codes have expressed or implicit exemptions for "public utilities." *See, e.g.*, California Electric Code Section 89.101.3.3(4) and (5) and "public utility" exclusion in Los Angeles County Electric Code Sections 80-3 and 80.6. There are similar exemptions in NFPA documents. Therefore, merely adopting the Electric Code, as Staff proposes, will do nothing. Malibu will have <u>no electrical safety standards for WCFs</u> unless our proposals are adopted.

[17] LA County Climate Vulnerability Assessment, October 2021, p, 7.

[18] Ibid., p. 7.

[19] Ibid.

[20] "Protecting Malibu's Future: Preventing Electrical Fires in Cell Towers by Introducing Enhanced But Generally Accepted Engineering Design Rigor and Adequate Proof of Work in the Application," Susan Foster & Tony Simmons, P. E., Updated May 8, 2022 by S. Foster. Attachment 1 Community Memo, Memorandum from W. Scott McCollough to Malibu City Council, "Response to Planning Commission Recommendation and Staff Draft Conforming Provisions," April 8, 2021.

"There are generally accepted standards for most other buildings and structures, including installations that house extensive and complicated electronics with similar characteristics to those employed as part of a WCF. The Community's proposed design standards incorporate those standards. In other words, we basically eliminated the "exception" so the general standards can apply. As a result, and consistent with FCC rules, Malibu will be enforcing "generally applicable building, structural, electrical, and safety codes and other laws codifying objective standards reasonably related to health and safety." *In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting; 2012 Biennial Review of Telecommunications Regulations*, 29 FCC Rcd 12865, 12945, ¶188 (2014).

"Separately, the Community's proposal sets out the information that must be contained in the application. The design is important, but it is equally crucial that applicants be required to show their work, provided in a way that allows for independent verification and analysis. Only then can Malibu residents be assured that every possible step has been taken to minimize the risk of yet another wildfire caused or made worse by equipment breakdown in a WCF.

"This paper provides specific and detailed explanations for the requirements we propose to help mitigate the profound fire risks in Malibu. It explains what we need by way of engineering up-front design and what is required for the telecommunications carrier to "show its work" in the permit application. Carriers will have their own professional engineers run their equipment through basic tests or produce standard design diagrams with an engineer's seal. Those scrutinizing the application will be able to independently verify the work was indeed done by the appropriate qualified personnel. This design and application content rigor should catch most design flaws that could, if left undetected, put Malibu at greater risk for fire.

"Malibu bears greater risk if telecom cuts corners in the engineering and design process. Our proposal requires just over a dozen documents in the Application, signed off on by a professional engineer employed by telecom. Those documents will be reviewed by Malibu's permitting and enforcement departments and, if everything is in order, facilities will be approved for installation in the city. We are simply asking carriers to do due diligence and submit the right paperwork to the City when they apply. If they are going to come into Malibu, they must do so safely. It's that simple.

"We present examples below of failure to scrutinize electrical equipment and utilize professional engineers to help protect life, health and property. These examples will be familiar to every member of the Planning Commission and, we trust, will serve as a reminder to all of us that engineering rigor and proof of work applied early in the process will protect the City from potentially catastrophic failures later on.

"We also provide several examples of the ways electrical fires can start in cell towers and why the new small cell infrastructure poses unique threats to Malibu. In addition, we demonstrate that setbacks and separation will accommodate telecommunications yet allow enough space and distance for residents to escape should an electrical fire still occur. Electrical fires cannot be extinguished by homeowners or even firefighters until power to the facility is cut by the utility.

"In some instances, de-energization of a cell tower has taken over 60 minutes. In such a circumstance, distance from residences, schools and other buildings may mean the difference between life and death.

"Homeowners should never fight a cell tower fire even if it is directly in front of their home. To fight an electrical fire before the tower has been de-energized by the local utility (10 to 60 minutes) risks electrocution. Residents of Malibu must flee their homes in the event of an electrical fire and that is why distance between towers and setbacks from homes is critical.

"Finally, we urge the Planning Commission and Staff to recognize that the federal government and public safety officials consider wireless infrastructure to be essential infrastructure. Therefore, any hesitation on the part of Staff to require our electric fire safety protocol may be allayed by appreciating that the infrastructure itself needs to be protected. Attempts by carriers to introduce slipshod and inferior design, materials and products in Malibu should be rejected.

"We have been asked if our electric fire safety protocol is new and if electric fire safety requirements have been adopted by other cities. The answer is yes, and the answer is no. We know some cities are beginning to write into their small cell ordinances that electric codes should be adhered to because of the growing awareness of electrical fire risk in cell towers very close to homes and schools. As such, cities have attempted to require electric fire safety protocols. But it appears most cities have not discovered the "loophole" arising from the public utility exception that renders their efforts to protect their cities ineffective. As far as we can tell, Malibu will be the first to identify this problem and actually force an objective, generally applicable standard for electric fire safety.

"Our proposed electric fire safety requirements are the result of in-depth collaboration between Tony Simmons, P.E., a professional engineer with decades of electric fire safety experience and Susan Foster, writer and an Honorary Firefighter with the San Diego Fire Department and a member of the 2001 Task Force in San Diego County that created the County's first wireless ordinance. That ordinance survived a challenge all the way to the U.S. Supreme Court. Susan Foster has worked with rank-and-file firefighters in California and across the country over the last 20 years on the issue of RF radiation health and safety.

"Mr. Simmons is a professional electrical engineer licensed by the States of California and Nevada. He is a recognized subject matter expert on electrical safety. As an employee of NV Energy, which served customers in California and Nevada, he was responsible for ensuring that no gap existed between the safety standards for customer-owned equipment and utility-owned equipment. Mr. Simmons designed a specialized test facility that integrated electrical equipment from East Asia, Europe, and the United States. This test site incorporated grounded and ungrounded electrical systems from all three regions and required Mr. Simmons to integrate standards from three regions to adhere to the technical requirements of the U.S. National Electric Code.

"Residents and city planners in various California cities have contacted Susan Foster seeking assistance in their efforts to create safer WCF ordinances by taking electric fire safety into account. Additionally, Susan Foster has met with city councilmembers and engineering/IT

personnel in several cities in Colorado, a state that also experienced an unprecedented fire threat in 2020 and more recently the December 2021 Marshall Fire which burned 6000 urban and suburban acres in six hours in Boulder County. Similarly, Tony Simmons' expertise has been requested by several California cities regarding electric fire safety and engineering. Mr. Simmons and Susan Foster are working on electric fire safety amendments for three Colorado cities.

"As it relates to Malibu, Susan Foster and Tony Simmons have worked over the past six months with attorney W. Scott McCollough, who has an extensive 37-year career in law and policy and was the Assistant Texas Attorney General responsible for utility matters, to arrive at our proposed electric fire safety requirements so as to minimize the chances of WCF electrical fires in Malibu. We did not know, until we pooled our collective knowledge and compared federal and state laws and local ordinances and regulations, that telecom was exempt from otherwise generally applicable codes and standards. We anticipate telecom is aware of the exception but chose to remain silent. This problem has now arrived at Malibu's doorstep and must be solved. We hope it will be resolved in favor of ensuring the safety of the city and its residents. News of this issue and problem is spreading, but Malibu has the opportunity – and responsibility – to lead the way, as it is known to do in matters of great importance.

WHY ELECTRICAL FIRE SAFETY?

"We propose fire safety requirements that consider Malibu's unique geographic location, its ongoing seismic activity, a marine climate conducive to expedited corrosion of WCF equipment, an abundance of dry brush, limited escape routes out of town, and year-round tourism which can swell the population by 4,000 visitors on any given weekend – adding to the burden on access/exit roads.

"Fire risks in Malibu are not hypothetical conjecture. This city has burned twice just in the last 15 years. Over the last nine decades, at least 30 wildfires have destroyed parts of this coastal community, with the most recent Woolsey Fire (the largest in recorded history), consuming almost 100,000 acres. The ongoing, severe drought in California, along with record high temperatures, makes the focus on fire prevention more urgent than ever.

"Our team in Malibu discovered the following four (4) California wildfires had been initiated, at least in part, by telecommunications equipment:

- **Guejito Fire (2007)** in San Diego which became part of the Witch Creek Fire, the worst fire in San Diego history.
- **Malibu Canyon Fire (2007)**; three utility poles overloaded with equipment from the following carriers snapped in the wind and ignited the grass below: Sprint (now T-Mobile), AT&T, Verizon, and NextG (now owned by Crown Castle). All four carriers as well as SCE were accused by the CPUC of attempting to mislead fire investigators.
- **Woolsey Fire (2018)**; A telecommunications lashing wire came loose igniting at least one of the two ignition points for the $6 billion fire. Southern California Edison (SCE) was cited for 28 violations by the CPUC. One critical violation involved the failure by SCE to mark as a priority the repair of a broken communications line and a

broken telecommunications lashing wire. The broken equipment was found during a May 2018 telecommunications inspection. Without priority designation for repair, this known electrical hazard remained in disrepair. In November 2018 the broken Edison telecommunications equipment was involved as part of the ignition of the month-long fire.

- **Silverado Fire in Irvine (2020)** involved SCE and a T-Mobile lashing wire. Silverado merged with a second fire causing the evacuation of 130,000 people.

"Preventing fires in Malibu has been a full-time job for Mayor Mikke Pierson since the beginning of his tenure on City Council. He was elected in 2018 two days before the Woolsey Fire broke out. Over 400 homes were lost with catastrophic impact on Malibu; many residents have still not made it through the permit stage for rebuilding. From a recent posting in Malibu's News Carousel:

> "*Wildfire has always been Malibu's number-one public safety threat, but the size, duration and severity of the Woolsey Fire was unprecedented, and showed us the dangerous new normal of drought, climate change and California mega-fires," said Mayor Mikke Pierson. "I am proud of the progress we have made in developing strategies to be even more prepared for disasters, including this siren system, which could be a powerful step toward community-wide preparedness*."

"The documents provided to the Planning Commission by Staff do not show sufficient commitment to treating fire as Malibu's number one public safety threat, as articulated by Mayor Pierson. Our plea, and that of the Community, is that the Planning Commission and City Council rectify this error. There must be strong and specific design, application content and inspection language in the Ordinance and Resolution. The whole point of applying electric engineering rigor is to make sure that when a device fails – and they all do at some point – it fails safely. Without this kind of rigor for WCFs, Malibu will expose itself to significant risk of yet another preventable fire.

"We have therefore been detailed and specific about what is required to reduce the risk. We are not asking for anything that is not already required of every business in Malibu that wants to install parking lot lighting, a sign in front of their place of business, or install complicated electronics inside their building. Citizens have a right to demand engineering rigor for the projects coming into Malibu extremely close to people's homes, schools, daycare centers, parks, places of business, restaurants and in every facet of life.

"We presently have no idea what the Planning Director will require in the applications. If application content is left entirely up to the Planning Director, the form can be changed at whim, especially after a personnel change. The application, however, is not just for Staff. The Planning Commission extensively relies on it, as does anyone participating in the application process. Unlike Staff and the Commission, public participants have no right or practical ability to require additional information beyond what is in the application. Their ability to reasonably participate and provide input is entirely dependent on the quantity and quality of the information in the application. The public needs and deserves more than the Staff materials provide.

"The Community wants more rigorous requirements, particularly relating to up-front design by qualified and licensed personnel, and full disclosure in the application stage. In other words, we expect every application submitted to Malibu to have 14 documents indicating successful completion of a test, a diagram, a design schematic, and a list of any potentially hazardous substances, all signed and sealed by a licensed professional engineer. The Community's protocol was designed by an electrical engineer with decades of experience in applying engineering rigor to protect life, health and property. He knows what is needed for both design and proof of work. He knows what is feasible and reasonable.

"To date, our fire safety proposals have been rejected by Staff/City Attorneys. We are particularly concerned that not only does our groundbreaking electric safety protocol get removed from every draft, but so does the fire safety wording we adopted from ordinances already passed by Encinitas and Sebastopol. That makes no sense for a city that has suffered two catastrophic fires in the last 15 years, and 30 over the last 90 years.

DESIGN AND PROOF OF WORK FOR THE APPLICATION

"Tony Simmons, P.E. has synthesized an electric fire safety protocol tailored to the specific needs of fire-prone Malibu. The engineering documents listed below in our 14-step electric fire safety protocol are required to demonstrate compliance with the generally applicable technical requirements of the following codes: the National Electric Code, the California Electric Code and the Los Angeles County Electric Code. Item (N) below indicates text pertaining to structural engineering requirements that, unlike the electrical safety portions, has been accepted and incorporated by Staff.

"Each of the 14 steps below represents a document to be included in each WCF application. Each document must be sealed by a professional engineer pursuant to the California Professional Engineer's Act. Documents A through E are routinely produced by commercially available software such as E-TAP or POWER TOOLS. Documents F through H are produced with CAD programs such as AutoCAD. Document I is required by all codes. Document J is a reaffirmation that all parties understand the service entrance switch is not readily accessible. Documents K, L, and M include information all employers are required to provide to their workers. Document N has been accepted by Staff.

(v) **Electrical and Structural Safety Information**. The following engineering documents prepared under the responsible charge of and sealed by a California licensed professional engineer must be included in the application:

(A) A short circuit and coordination study ("SCCS") calculated pursuant to the IEEE 551-2006: Recommended Practice for Calculating AC Short-Circuit Currents in Industrial and Commercial Power Systems or the latest version of that standard. The study must demonstrate the protection devices will ensure the equipment enclosure will not be breached. The SCCS must include analysis of Voltage Transient Surges due to contact of conductors of different voltages;

REASON FOR REQUIRING THIS DOCUMENT: This study is required to demonstrate the installation complies with NEC Articles 110.9, 110.10, 110.16 and 240.

WHY THIS STUDY IS IMPORTANT: All electrical equipment will fail. This study ensures that electrical equipment will not catastrophically fail. As an example, electrical conductors may rub together and damage the insulation, allowing excessive current to flow. This study ensures that the fuse or circuit breaker de-energizes the circuit fast enough to prevent arcing or fire. This study could have identified beforehand that meters would catastrophically fail in Stockton in 2015. This study can ensure that a WCF mounted on poles with transmission and distribution circuits, like the pole on the corner of Malibu Canyon Road and Harbor Vista, does not fail like electric meters did in Stockton in 2015.

(B) A one-line diagram of the electrical system;

REASON FOR REQUIRING THIS DOCUMENT: This diagram provides a map of the electrical installation and serves as the primary reference for all the other documents.

WHY THIS DIAGRAM IS IMPORTANT: This document allows less experienced electrical workers to quickly trouble shoot electrical malfunctions and failures and to identify a de-energization point.

(C) Voltage Drop & Load Flow Study;

REASON FOR REQUIRING THIS DOCUMENT: This Study proves the electrical conductors are large enough to ensure that equipment supplied by the electricity flowing through conductors operate within the design range for that item of equipment.

WHY THIS STUDY IS IMPORTANT: If the voltage is too low or too high, electrical equipment may not operate correctly or be damaged.

(D) Load Calculation;

REASON FOR REQUIRING THIS DOCUMENT: The load calculation ensures each item of equipment is sized to safely carry the design load.

WHY THIS DOCUMENT IS IMPORTANT: This document lists all load connected to the electrical system.

(E) Panel Directories;

REASON FOR REQUIRING THIS DOCUMENT: Panel Directories are provided to show workers which switch or breaker de-energizes a specific circuit or piece of equipment.

WHY THIS DOCUMENT IS IMPORTANT: The panel directory is required by Electric Codes so that electrical workers or less experienced individuals can quickly de-energize a circuit in an emergency without a "trial and error" approach.

(F) A plot plan showing the location of the mounting structure including address, or structure designation, or GPS location;

REASON FOR REQUIRING THIS DOCUMENT: This document is necessary to quickly identify the location for prompt emergency and non-emergency response.

WHY THIS DOCUMENT IS IMPORTANT: This document shows the exact location of the WCF and the access route. Power poles are commonly assigned addresses that may be located several hundred feet from the actual location.

(G) A plot plan showing the location of the service disconnecting means;

REASON FOR REQUIRING THIS DOCUMENT: This document is necessary to demonstrate the location of the switch or circuit breaker that separates the customer electrical system from the utility electrical system. This is commonly called the "main switch" or the "main circuit breaker".

WHY THIS DOCUMENT IS IMPORTANT: A WCF has been proposed on a streetlight pole on Cross Creek Road. The WCF is powered from one electric service. The streetlight is powered from a separate electric service. In order to suppress a fire, the power to the streetlight and the power to the WCF must both be de-energized. This plan shows both de-energization points. Service disconnects for streetlights may be several hundred feet away on a different street.

(H) An elevation drawing of the equipment and the service disconnecting means;

REASON FOR REQUIRING THIS DOCUMENT: This drawing shows how the equipment will look once installed. It is critical to ensure the workspace has adequate room to operate safely.

WHY THIS DOCUMENT IS IMPORTANT: Performing work on electrical equipment is hazardous. Workers are entitled to sufficient room to safely work and to escape if an arc develops.

(I) A demonstration there will be signage as required by the California Electric Code or the Los Angeles County Fire Department Chief or his or her designee;

REASON FOR REQUIRING THIS DOCUMENT: The CEC requires that electric equipment be labeled.

WHY THIS DOCUMENT IS IMPORTANT: This is necessary to ensure that first responders or electrical workers safely de-energize the correct equipment.

(J) A demonstration the service disconnecting means shall be mounted at an elevation determined by the Los Angeles County Fire Chief or his or her designee in conjunction with the electric utility;

REASON FOR REQUIRING THIS DOCUMENT: The CEC specifies that the service disconnecting means be readily accessible, which generally means operatable without a ladder. To prevent vandalism of communication systems in public right of ways, the service disconnecting means may be mounted out of reach from the ground.

WHY THIS DOCUMENT IS IMPORTANT: To prevent casual vandalism, the service disconnect may be mounted at a height not reachable from ground level.

(K) A demonstration there will be instructions for deenergizing the equipment by First Responders.

REASON FOR REQUIRING THIS DOCUMENT: Certain electric equipment must be de-energized in a specific sequence to ensure safety.

WHY THIS DOCUMENT IS IMPORTANT: Certain electrical equipment can create an additional hazard if de-energized in the incorrect sequences.

(L) A list of toxic substances that may develop during arcing or fire that may impede fire suppression efforts;

REASON FOR REQUIRING THIS DOCUMENT: The intense heat of an electrical arc may turn non-hazardous substances into hazardous substances. Special protective equipment may be required.

WHY THIS DOCUMENT IS IMPORTANT: Electric arcs instantly reach temperatures of thousands of degrees. Normally non-hazardous material may become hazards. Metals may vaporize and damage lungs.

(M) A list of hazards that may develop during arcing or fire that may impede fire suppression efforts;

REASON FOR REQUIRING THIS DOCUMENT: Arcing or fire may create a pressure wave that can imperil life, health and property.

WHY THIS DOCUMENT IS IMPORTANT: Electric arcing can vaporize copper or aluminum. Copper expands 67,000 times when converted from solid to vapor, which can cause an air blast that throws an individual several feet with fatal force.

(N) Structural Safety Information. The structural/civil engineering documents as recommended by a California licensed professional civil or structural engineer employed by Center for Municipal Solutions.

NOTE: The proposed ordinance includes a standard recommended by APCO/ANSI. This issue has been adequately addressed in the documents provided by Staff.

"Every draft we provided to Staff included the 14 documents listed above. As stated, each step represents a diagram, design schematic, or list of potentially hazardous substances that must be signed off on by a professional engineer as required in our fire safety and structural engineering protocol. Staff has persistently removed the protocol, with the notable exception of structural engineering. We do not know why.

FIRE PREVENTION LANGUAGE TAKEN FROM ENCINITAS & SEBASTOPOL SMALL CELL ORDINANCES

"The following language was offered to Staff, having been taken from ordinances previously passed in Sebastopol and Encinitas, California. Those cities' Small Cell Ordinances expanded on fire safety language beyond basic adherence to local fire codes. Susan Foster contributed to writing the fire safety portion of the Encinitas Small Cell Ordinance passed initially in 2019 and amended in 2020. The intent of this language was to meet the needs imposed upon each city by the proliferation of small cells and the proximity of these electrical devices for the first time so close to residences, schools, hospitals, playgrounds, daycare centers and parks. Malibu Staff removed this language from the drafts provided by the Community.

APPLICATION AND REVIEW PROCEDURES

"Fire Department Review. After submittal by the applicant, the Director shall transmit the entire application packet to the Fire Prevention Division. The Fire Chief (or his or her designee) shall review the application for compliance with objective health and safety standards related to fire hazards. The Fire Chief shall inform the Director in writing of its conclusions and any recommended conditions for public health and safety. Review by the Fire Prevention Division may reasonably require additional processing time, including potentially exceeding FCC Shot Clock timelines if necessary. The Fire Chief (or his or her designee) may select and retain an independent consultant with expertise and/or specialized training in fire safety and fire hazard mitigation and prevention satisfactory to the Fire Chief in connection with any permit application. The Fire Chief may request independent consultant review on any matter committed to Fire Department review or approval. Subject to applicable law, in the event that the Fire Chief elects to retain an independent consultant in connection with any permit application, the applicant shall be responsible for the reasonable costs in connection with the services provided, which may include without limitation any costs incurred by the independent consultant to attend and participate in any meetings or hearings. The same procedures for fee deposits, cost reimbursements and refunds to the applicant as described above shall be applicable to independent consultant review required by the Fire Chief.

CONDITIONS OF APPROVAL

"Safety Hazard Protocols. If the Fire Chief (or his or her designee) or Board of Chiefs of the Dispatch Joint Powers Authority finds good cause to believe that the facility (including, without limitation, its accessory equipment, antenna and/or base station) presents a fire risk, electrical hazard or other immediate threat to public health and safety in violation of any applicable law, such officials may order the facility to be shut down and powered off until such time as the fire risk or electrical hazard has been mitigated. Any mitigations required shall be at the permittee's sole cost and expense.

"Continued Monitoring. The permittee's Registered Engineer shall certify in writing continued compliance with the safety standards of this policy on or before January 30th of each calendar year. The Fire Chief will continue to monitor the safety of wireless facilities in the City and publish a yearly review of fire safety considerations regarding potential risks posed by electrical components of new technologies, the presence of numerous small cell wireless facilities in the ROW and any fire events or near-miss events related to wireless facilities.

"Oversight Authority. The Fire Chief, in his or her discretion, may issue written fire safety performance directives that shall apply to all existing permits within the scope of such directives and shall be considered as though incorporated into such permits. All permittees shall be required to comply with such directives at the permittee's sole cost and expense.

Fire Investigations.

"(i) The Fire Chief shall receive and investigate any credible fire safety complaint made by a resident of the City regarding a wireless facility in the City. Cost of such investigation shall be borne by the permittee. Permittees shall also inform the Fire Chief in writing within one business day of any fire or near-ignition event at any facility or replacement of any facility component in connection with any malfunction pertaining to excess heat, arcing or discharged current. (ii) The Fire Chief shall further investigate any fire in or around the vicinity of a small cell wireless facility. If the conclusion of the investigation is that any facility component is at fault, the Fire Chief shall immediately notify the Malibu City Council of his/her findings, and the facility at issue shall be de-energized until such time as the permittee provides assurances or undertakes precautions satisfactory to the Fire Chief that such event or similar event will not reoccur. In the event that no such assurance is received, and the Fire Chief has good cause to believe that such failure to comply constitutes a threat to health or safety, permit revocation shall be initiated by the Director.

DESIGN STANDARDS

"Electric Meters. Small cells and other infrastructure deployments shall use flat-rate electric service or other method that obviates the need for a separate above-grade electric meter. If flat-rate service is not available, applicants may install a shrouded "smart meter" that shall not exceed the width of the pole provided that such smart meter shall be placed at least 10 feet above ground level. If the proposed project involves a ground-mounted equipment cabinet, an electric meter may be integrated with and recessed into the cabinet, but the Director shall not approve a separate ground-mounted electric meter pedestal unless (1) the separate ground-mounted meter pedestal would be placed off the sidewalk and (2) the applicant's Registered Engineer demonstrates with clear and convincing evidence that all other alternatives for the electric meter are technically infeasible.

Fire Safety Standards.

"All wireless facilities shall include:

1) a power shut off readily accessible to fire service personnel, such as by means of rapid entry Knox or similar type systems installed as required by the Fire Chief, upon arrival at the scene of a fire and/or anticipated power surge due to power being turned off or on for any reason;

(2) surge protection devices capable of mitigating a direct or partial direct lightning discharge;

(3) surge protection devices capable of mitigating significant electrical disturbances that may enter the facility via conductive cables;

(4) at least one-hour fire resistant interior surfaces to be used in the composition of all structures and

(5) monitored automatic fire notification and extinguishing systems for all wireless facilities approved by the Fire Chief.

LEARN FROM PAST MISTAKES

"The 14 documents must be included because past failures to employ them caused mistakes that put people and their homes in harm's way.

"Four of the six tragedies below occurred in California. The California Public Utilities Commission (CPUC) has deferred to the utilities to have independent engineering review performed. In other words, the utilities have been policing themselves. The utilities have been remiss in overall engineering design as demonstrated by the following:

- In 2007, the Malibu Canyon Fire started when three Southern California Edison power poles overloaded with wireless transceivers from Verizon, AT&T, Sprint (now T-Mobile) and NextG (now Crown Castle), in violation of state regulations, snapped in Santa Ana winds, igniting the tall grass at the base of the power poles. Southern California Edison (SCE) agreed to pay $37 million. AT&T, Verizon and Sprint shared equal parts in a $12 million fine. NextG was fined $14.5 million. All five parties were accused by the CPUC of attempting to mislead fire investigators.
- In 2015, nearly 5000 PG&E smart meters exploded and caused over 80 fires when a transmission line contacted a distribution line, sending a surge through the city that exceeded the smart meters' capacity.
- In Canada and the US between 2012 and 2015, 17 utilities removed 790,000 Sensus smart meters as a safety precaution because of a fire hazard.
- In 2018, the Woolsey Fire was started by utility owned equipment, including a telecommunications wire, that led to the most destructive fire in Malibu in the last 100 years. It burned over 400 homes, killing two people in Malibu, and cost over $6 billion.
- In June 2020, the head of PG&E pled guilty to 84 counts of manslaughter in the deaths of residents caused by the 2018 Camp Fire in Paradise, California. A nearly 100-year-old

electrical transmission line owned and operated by PG&E was identified as the cause of the Camp Fire.

- In February 2021, the electric grid in Texas collapsed because electricity and natural gas providers had not winterized their equipment despite warnings 10 years earlier. Thousands of homes were damaged due to water leaks caused by freezing pipes, and so far, 69 deaths have been attributed to the energy grid collapse. Damages are estimated at $18 billion.

"We believe a higher level of professionalism and a coming together of multiple disciplines will enhance the chances for a less hazardous outcome as largely untested small cell technology exponentially increases within Malibu's city limits.

WIRELESS FIRES ARE ELECTRICAL FIRES & THEY DO HAPPEN

"Three fire officials, including Battalion Chief Drew Smith, recently stated they have not specifically fought 5G tower fires and claimed data is not available on 5G tower fires. It is early for data to be available on 5G cell tower fires and it is worth noting that no agency or industry in the United States, except those who have done so on a private basis, has kept track of cell tower fires from the installation of the first cell tower to the present. Yet proof of electrical fires in cell towers after the 1990s is available. This evidence has been collected in media reports and by some firefighters who have personal records and photographs; some have willingly shared that information. Additionally, we have obtained fire incident reports on cell tower fires around the country and confirmed arcing as a frequent heat source and "electrical" as a frequent cause.

"Thanks to the pioneering work of retired Los Alamos Laboratory physicist Dr. David Stupin, we have a reasonable sense of how often cell tower fires were occurring up to the point where he stopped keeping statistics in 2015. Dr. Stupin's research led him to believe that approximately one cell tower fire happens every month somewhere in the United States. The majority occurred because of electrical malfunction or because there was a deficiency of structural integrity and the collapse itself triggered a fire. We now face an exponential increase in small cell WCFs in the US. The CTIA is the telecommunications industry lobbying entity. They recently commissioned a study focusing on the increase in small cells in the United States. From the CTIA website:

> "The Accenture analysis commissioned by CTIA also found that the United States will see a **550% rise in small cells by this year**, underscoring the timeliness of the FCC's action to jumpstart broadband investment. Small cell deployments will escalate rapidly from roughly 13,000 deployed in 2017 to over 800,000 cumulatively deployed by 2026, according to the analysis." [2018]

"We urge you not to wait for the data on 5G cell tower fires before protecting Malibu from what we consider to be an inevitable increase in cell tower fire risks. If the industry has not been keeping track of cell tower fires during the last four generations of wireless, there is no foundation on which to place our hope that they will keep track of 5G cell tower fires. We choose to act with the knowledge of how electrical devices fail, and the fact there is nothing about small cells – the 5th generation of wireless that is being brought into our communities in

greater numbers and in closer proximity to people – that can lead us to any conclusion other than the fact the risk of wireless fires in Malibu is increasing with the installation of every small cell.

"From the December 16, 2020, Community Meeting, we feel the impression was left, based upon statements by fire officials, that 5G towers are not fire risks. Yet for fire officials of the Malibu section of the Los Angeles County Fire Department to state they have not fought 5G fires does not mean 5G tower fires do not exist. 5G WCFs *are* fire risks in the same way that 2G, 3G, 4G WCFs are fire risks. They are electrical devices. They will fail. Our goal is to put the WCFs through no more engineering rigor than would be required of the signage and electrical lighting in front of Malibu restaurants, gas stations and other commercial establishments in hopes of catching design flaws that could eventually result in fire. And if they do result in fire, we want the diagrams in place with the city of Malibu to show the First Responders the most pertinent information with respect to design features and chemicals involved so that our First Responders can respond as expeditiously and safely as possible.

FIRE RISKS WITH WIRELESS COMMUNICATION FACILITIES

"The 2015 Stockton, CA fires (multiple homes) were caused by smart meters used to measure electric use on the sides of homes. Smart/AMI meters may be deficient in suppressing transients/surges and the catastrophic failure of smart meters to handle a massive surge in the City of Stockton demonstrates that electronics close to the home, which many WCFs are and will be in the future, may pose a threat to life, health and property if not screened initially through our recommended Short Circuit and Coordination Study (SCCS). What happened in Stockton can happen in Malibu. If the utility pole on the corner of Malibu Canyon Road and Harbor Vista is hit by a car, and the transmission line contacts the distribution line, we could expect the electric meter and possibly the WCF to catastrophically fail. It would be necessary to de-energize the transmission line and thereby de-energize the area from City Hall and Cross Creek Road to Pepperdine and beyond. Using the Coordination Study will make it clear what the appropriate fuse size should be. If the WCF is utilizing the appropriate fuse size, the fuse will instantly de-energize the circuit and prevent catastrophic failure.

"For metered WCFs, SCE uses electronic meters that may have the same susceptibility as the meters in Stockton. Metered wireless facilities must go through the Community's electric fire safety protocol to determine if they have adequate surge protection against the type of fault that occurred in Stockton.

"Lightning strikes can contain more energy than the electrical mishap that occurred in Stockton. California is experiencing more lightning strikes due to the evolving climate. Therefore, electrical installations in Malibu must mitigate the increased frequency of lightning.

"The January 28, 2019, edition of The Los Angeles Times reported that California utility equipment sparked more than 2,000 fires in over a three-year period. Cal Fire determined 17 of 21 California fires in 2018 were attributed to pole issues. The deadly Campfire was confirmed to be started by power lines and pole loading. In order to accommodate the newest wireless facilities, companies like Verizon are requiring an increase of pole height by 20-25% (adding 10-

ft extension onto 40-ft or 50-ft pole) significantly lengthening the pole while decreasing the force of wind required to topple a pole.

"No community outside Paradise, California has been more devastated by wildfire than Malibu. The overloading of three SCE utility poles by four different telecommunications carriers sparked the Malibu Canyon Fire in 2007 and in November 2018, a downed telecommunications lashing wire ignited the Woolsey Fire, forever scarring Malibu by taking out over 400 homes and costing over $6 billion. With the exponential increase of WCFs and the administrative exemptions offered to telecom, our concern is that this problem will increase rather than decrease. Thus, electric fire safety protocol and structural site hardening are essential for Malibu.

EXAMPLES OF WCF FIRES

"There is a common misperception that WCF fires are primarily caused by arson. While there are documented cases of arson in 2020 related to misinformation about 5G and COVID-19, these cases were a short-term phenomenon. The examples below are representative of WCF fires that have occurred through the years as documented by the news media. Electrical malfunction and welding on WCFs for routine maintenance are the cause of the vast majority of cell tower fires. The examples below are representative of the genuine risks that could be facing Malibu.

July 2013 – Besalem, Pennsylvania: An AT&T cell tower fire was sparked when welders were working 70 feet in the air on a tower; sparks set off an intense fire ten feet above them. They tried to put it out but ended up having to race down to get help. The fire spread quickly and left the 10-story tower leaning over precariously. Initially, firefighters could not throw water on the fire because electricity was still surging through the tower and it took utility crews longer than expected to get it turned off. Essentially the fire was allowed to burn itself out.

July 2014 – Columbus, Ohio: Black smoke poured from a light pole with a WCF in Grandview Heights around 10:00 AM. The pole held lights for the football field as well as cell phone equipment. Streets were blocked off while emergency crews were on the scene. Homes within a one-block radius of the school were evacuated. Suspected electrical fire.

September 2014 – Thurston, Oregon: A cell tower fire at Thurston High School sent up a smoky plume above the Colts sport field. The cause of this fire was undetermined but Battalion Chief Marcus Lay explained, referring to the fire, that "It is contained and basically under control, but we have to wait until Springfield Utility Board gets here to get the power completely shut off to finish extinguishing it." Cause undetermined.

June 26, 2020 – Hanover, Virginia: A cell tower caught on fire overnight; a heavy storm with lightning moved through the area shortly before the call. Hanover Fire was able to extinguish flames on top of a cell phone tower. When they arrived around 11:15 PM, they saw a cell tower completely covered in flames. The fire was safely put out and officials believe that it was an accidental fire as the result of electrical/mechanical issues.

October 2020 – Irvine, California: Silverado Fire Southern California Edison Co. may seek contributions from T-Mobile as it is suspected the company's lashing wire touched an adjacent power line and sparked the fire. On October 26 SCE told the CPUC that a lashing wire attached to a telecommunications line running under the utility's 12-kV power line may have ignited the wildfire. The blaze seriously injured two firefighters and scorched more than 12,000 acres in Orange County and forced the evacuation of over 60,000 people, according to the California Department of Forestry and Fire Protection. In general, multiple companies can use the same utility poles, but each is responsible for managing its own equipment. Utilities are supposed to regularly look for any threats from telecom equipment installed on shared poles. This is not a foolproof system of governance.

November 2020 – Lapeer, Michigan: Wiring in a 197-foot-tall cell tower caught fire shortly after 9 p.m. Flames were visible shooting from the top of the hollow tower, while near the base of the structure the interior fire was so hot the metal glowed orange and pink. As a result of the fire that weakened the strength of the tower, there was a visible lean to the structure — the height of a 15-story building. The tower was dismantled and replaced.

March 2021 – Chula Vista, California: An AT&T cell tower partially concealed in a light fixture around a track at Otay Ranch High School burst into flames at 7:30 PM on a Tuesday evening. The Fire Incident Report was obtained through a public records request. The area of origin was within the equipment; the heat source was "electrical arcing". When the fire department arrived the 100-ft pole appeared to have an internal fire that traveled up the pole to the cell phone equipment and stadium lighting at the top of the pole. The fire department requested utility SDG&E to respond to the location. Firefighters maintained a safe distance until they could verify all power supply to the pole had been secured. As they were waiting for the representative from SDG&E to arrive to confirm the power had been cut, the heat of the fire due to arcing caused the steel pole to become molten plasma. It collapsed onto the bleachers near the football field, burning the track and destroying the bleachers. Once the rep from SDG&E arrived on scene and verified the power had been secured and that there was no electrical hazard, firefighters extinguish the fire using a water and foam combination.

WHY DOES 5G INFRASTRUCTURE POSE A GREATER FIRE RISK TO RESIDENTS

"It is not the frequency of cell tower fires that concerns us the most. It is the severity of what a single cell tower fire can do. The biggest risk is that WCFs have been brought much closer to local populations and those installations are much more densely situated. Every electrical device including every WCF must be deenergized before a fire can be fought. On a good day that can happen in 10 minutes. Some cities find that it is 30 minutes or more before the electric company cuts the power. If the firefighters fight the fire before the tower is deenergized, they can be electrocuted. A lightning strike is a type of transient event that may lead to WCF catastrophic failure. Malibu residents will recall in May of 2019, just before Memorial Day weekend, several beaches were closed in Malibu because of a lightning storm that created unsafe conditions. **Thus, the placement of WCFs must allow time and space for escape because a fire originating in a WCF must not be fought by residents or by firefighters until SCE has turned off the power. This is why we propose separation and setback requirements as strategies to mitigate risk to residents**.

"One firefighter who is accustomed to fighting fires under Santa Ana conditions in California understood the extreme risk posed by a cell tower fire near a populated area. He described how he would fight such a fire:

> *"If the fire involves energized equipment, do not put water on it. Use water only to extinguish anything like trees, grass, vegetation, etc. that it may spread to, and then use water in short bursts if it's adjacent to the pole. Call the utility company immediately so they can de-energize. Keep people back for 2 spans in either direction and make sure all personnel and equipment stay out from under the power lines. Focus on public safety and exposure protection until it's confirmed that the power has been shut off."*

"We firmly believe the greater the distance between WCFs, the more likely an individual(s) would be able to escape homes, schools, hospitals, nursing homes. Distance between towers and from property lines will be critical to escape. Distance from WCFs and property lines may mean the difference between life and death. Due to the length of time it can take to cut the electricity and subsequently fight a fire, particularly one that has spread, we feel it is not worth the very real potential for loss of life if cell towers, small cells or macro towers, are located within residential neighborhoods. Additionally, care should be taken to keep cell towers away from roots of entrance and egress for neighborhoods. The same caution should be taken with densely populated facilities like schools, daycare centers and special zones as designated by the city.

"The scars from the 2007 Malibu Canyon Fire and the 2018 Woolsey Fire are still evident on the land. The human toll appears greater. The residents speak openly about PTSD, particularly on those days when the winds blow as they did during the Malibu Canyon Fire and the Woolsey Fire. The winds remind residents of the Santa Anas that carried burning embers sideways, whipped flames such that they consumed many residents' homes, blocked exit routes out of the city and literally terrorized the whole of Malibu – the land, the air, and most of all the residents, their animals and wildlife.

"FALL ZONE: We would like to add that we believe expansion of the fall zone should be carefully considered. It must be at least the height of the tower with 50% or at least 25% added onto that because of the falling debris field.

UNIQUE FIRE RISKS TO MALIBU & GERMANE TO OTHER PARTS OF CALIFORNIA, AS WELL AS OTHER STATES

"VERY HIGH FIRE HAZARD SEVERITY ZONE: The City of Malibu is designated as a Very High Fire Hazard Severity Zone. The City was devastated by major fires in 2007 and 2018 due to power pole failures. In each instance the utility structures supported wireless communications facilities that either initiated or significantly contributed to the ignition. The 2018 Woolsey Fire consumed over 96,000 acres, destroyed at least 1,643 structures, killed three people, and prompted the evacuation of more than 295,000 people. It was one of several fires in California that ignited on the same day. Malibu has still not recovered. The 2007 fire burned 3,836 acres, 36 vehicles and 14 structures, including Castle Kashan and the Malibu Presbyterian Church, and damaged 19 other structures. It is essential that wireless communications facilities be engineered to prevent fire and withstand fire events as much as possible, and at least in a

manner comparable to other commercial facilities with extensive, complicated electronics and wiring, as well as flammable, sometimes hazardous and toxic, materials on site.

"SEISMICALLY ACTIVE: Malibu is geographically defined by the Santa Monica Mountains to the North, the Pacific Ocean to the South, the Santa Monica Fault to the East and Ventura County to the West. Malibu is a seismically active area with five active faults in the general vicinity. These nearby faults include Malibu Coast Fault, Las Flores Thrust Fault, Santa Monica Fault, Palos Verdes Hills Fault, and the Newport-Inglewood Fault. There are also potential seismic hazards and soil hazards in Malibu. Seismically-induced soil hazards include liquefaction – a temporary, but substantial loss of strength in granular solids, such as sand, silt, and gravel, usually occurring during or after a major earthquake. Seismic activity can also induce subsidence and settlement. Subsidence is deep settlement due to the withdrawal of fluid (oil, natural gas, or water). Seismically-induced settlement occurs in loose to medium dense unconsolidated soil above groundwater. These soils compress or settle with seismic shaking. Settlement can also result from human activities including improperly placed artificial fill, and/or structures built on bedrock or soil with differential settlement rates. There is also risk from expansive soils such as clay; it can swell when wetted and shrink when dried. Wetting can occur from rainfall, groundwater fluctuations, lawn watering, broken water or sewer lines. Expansive soils can result in cracks in foundations. Expansive soils located on slopes can cause slope failure. Unstable soils can produce landslides, debris flows, and rock falls. Hill slopes, which occur in Malibu, have a tendency to fail. Unless engineered properly, development in hillside areas tends to increase the potential for slope failure.

"MARINE ENVIRONMENT: Malibu is a marine environment. Thus, there are accelerated corrosion issues due to the combination of increased moisture and salt in the air. Metal parts within wireless facilities fail faster in this corrosive environment. This corrosion may adversely affect the structural and electrical integrity of a wireless facility. In addition, corrosion may pose a risk to internal parts which, if corroded and not replaced on a very conservative maintenance schedule, may become fire risks themselves. Therefore, the failure rate of wireless facilities is higher and the need for stricter standards in the very beginning is essential.

"GREATER NEED FOR STRUCTURAL INTEGRITY: Because of seismic and soil displacement and/or settlement risks as well as the potential for fires, heavy rains, mudslides and landslides, all wireless facility sites must be built to the standards of ANSI/APCO Public Safety Grade Site Hardening Requirements. This standard represents public safety requirements regarding various characteristics to make mission critical communications network sites sufficiently robust to meet the service availability requirements of public safety. These safety standards can be found in APCO ANSI 2.106.1–2019, or their replacements. Collapsed WCFs are a cause of multiple wireless facility fires. Structural integrity is paramount to keeping Malibu safe from fire started by collapsed wireless equipment.

"This confluence of geographic and climate characteristics means that Malibu needs greater fire safety regulations than non-marine, low fire hazard, seismically stable regions. Malibu is the first local government to be informed that the exemption for telecom utilities render the National Electric Code, the California Electric Code, and the Los Angeles County Electrical Code

insufficient to protect the public from the electrical risks of WCFs. Malibu can protect itself and its residents by adopting the safety provisions we propose.

WIRELESS CELLULAR FACILITIES AS CRITICAL INFRASTRUCTURE

"This final subsection recognizes that the Federal government and state public safety organizations have declared that wireless networks are critical infrastructure for national security and public safety purposes – often at the urging of the wireless industry. Critical infrastructure must be protected too, through appropriate fire and structural safety requirements. We are not aware of any evidence indicating telecom objects to a stronger electric safety protocol. If such an objection exists, it should be made on the record and the basis fully explained.

"Cell towers are considered critical infrastructure to maintain communication during times of natural and man-made disasters. Pandemics are one example, as illustrated by the timing of the US Department of Homeland Security, Cybersecurity & Infrastructure Security Agency's (CISA) March 28, 2020 Guidance on the Essential Critical Infrastructure Workforce: Ensuring Community and National Resilience in COVID-19 Response Version 3.0 (updated on April 17, 2020), available at https://www.cisa.gov/sites/default/files/publications/Version_3.0_CISA_Guidance_on_Essential_Critical_Infrastructure_Workers_1.pdf. The Wireless Infrastructure Association applauded the designation. See https://wia.org/wia-applauds-dhs-action-for-access-to-critical-infrastructure/.

"In Malibu, we are simply asking telecommunications carriers to treat their facilities like the essential infrastructure that it is. Anything less is counterintuitive and ill-advised.

"Further, even before the DHS guidance the Association of Public-Safety Communications Officials (APCO) International received final approval from the American National Standards Institute (ANSI) in 2019 for an American National Standard (ANS) that identifies hardening requirements for public safety grade sites. In other words, structural engineering for WCF sites has gone from the concept practiced by some to a standard that should be followed by all.

"APCO ANSI 2.106.1-2019 was developed by the Public Safety Grade Site Hardening Working Group. This standard was derived from the 2014 National Public Safety Telecommunications Council (NPSTC) report (Chapter 9) and the work of the original APCO Broadband Committee. The document is intended to assist public-safety communications network builders with the guidelines necessary to build hardened public safety grade networks.

"With five (5) active earthquake faults running through Malibu, this is a welcome standard. It reads, in part:

> This standard represents public safety requirements regarding various characteristics to make mission critical communications network sites sufficiently robust to meet the service availability requirements of public safety. In other words, what it takes to make network sites "public safety grade" or the extent to which they are "hardened."
>
> The document is intended to assist public safety communications network builders with the guidelines necessary to build hardened public safety grade networks. This document addresses hardening for wireless transmission and reception sites. Specifically, it addresses the hardening requirements to provide the appropriate site conditions and characteristics

for wireless system electronics (e.g., transmitters and receivers) and wireless passive components (e.g., coaxial cables and antennas).

These sites need to withstand the onslaught of natural or manmade conditions and consider the distinct requirements for different geographic locations of the United States, including their likelihood to be subject to severe storms, earthquakes, tornadoes, and other disasters.

"In the face of increasing federal emphasis on WCFs as essential to Public Safety and no record of opposition from the telecom industry, we question why anyone would be reluctant about embracing our safety protocol and application content requirements."

End Malibu White Paper

CONCLUSION

The Malibu solution is not a guarantee that telecommunications equipment evaluated through established design criteria at the application stage will never cause another fire. Yet it is a workable solution within the challenging confines of the FCC promoted and telecom-preferred shot clocks.

Two very important takeaways are: 1) safety belongs to the municipalities to regulate; 2) shot clocks may be tolled with a written letter to the carrier if an application is deemed incomplete. A tolling letter must be sent to the carrier or the carriers' representative(s) expeditiously. Sufficient staff needs to be in place to process applications.

We strongly recommend adding sufficient planners including outside consultants capable of evaluating code compliance to assess incoming applications. Los Angeles County would be well advised to effectively and efficiently shift the compliance requirements so that the onus is on the telecom applicants to have completed applications in accordance with design requirements listed by the Planning Department when they enter Los Angeles County. This can be accomplished in a reasonable and balanced manner.

It is not enough to evaluate safety at the backend. Safety must be evaluated upfront. Code compliance must be evaluated upfront. Specifying and posting design criteria as part of the application checklist for the telecommunications applicants is essential.

To discard environmental review – which includes climate change and the synergistic effect of climate and fire, further compounded by the fact that telecommunications equipment can and does cause wildfires – in order to comply with the confines of the shot clock is a failure of the most precious responsibility entrusted to our local leaders. This is indeed a dangerous cocktail in any location but particularly California. Some of the most vulnerable members of our community will be at the greatest risk.

We are imploring the leaders of Los Angeles County and the Planning Staff to include environmental review and forgo the temptation to utilize ministerial permits. The future of Los Angeles County and the safety of your residents' lives, their property, the County's wildlife, and the County's yet dwindling remnants of our rich Native American heritage rest in the decisions you are about to make.

Susan Foster

PO Box 1444
Lyons, CO 80540
susan.foster04@gmail.com

November 15, 2022

Holly J. Mitchell, Chair
Sheila Kuehl Chair, Pro Tem
Hilda L. Solis, Supervisor
Janice Hahn, Supervisor
Kathryn Barger, Supervisor
Celia Zavala, Executive Officer

Agenda Item 7 – Wireless Ordinances

To the Honorable Board of Supervisors:

Please accept these written comments submitted by California Fires and Firefighters. This nonprofit is organized under Colorado law.

As Co-Founder of California Fires and Firefighters, much of my experience working on fire prevention in California is reflected in multiple local zoning ordinances and appeals on behalf of California firefighters from San Diego County in 2001 to the City of Malibu in 2021.

The comments are contained within the attached White Paper:

PROTECTING LA COUNTY'S FUTURE:

HOW FIRE RISKS FROM TELECOMMUNICATIONS EQUIPMENT, CLIMATE CHALLENGES & A DANGEROUS SHIFT AWAY FROM ENVIRONMENTAL REVIEW THREATEN LOS ANGELES COUNTY'S FUTURE

These comments are submitted on behalf of the organization and in a representational capacity for all of Los Angeles County residents, including the firefighters who live and work in Los Angeles County and their families, who will be affected by any revision to the County's wireless ordinances.

Respectfully submitted,

Susan Foster
Co-Founder, California Fires and Firefighters

Attachment

EXHIBIT 11

WORLD RESOURCES INSTITUTE



4 Graphics Explain Los Angeles' Rare and Devastating January Fires

February 5, 2025 By **James MacCarthy** and **Jessica Richter** Cover Image by: Kit Karzen/Alamy Stock Photo

Charted

Topic **Forests** *Region* **North America**

Editor's note: This article was first published on Jan. 9, 2025. It was updated on Jan. 14 and Feb. 5 to reflect the latest information.

Wildfires tore through the Los Angeles area this January, displacing tens of thousands of people and claiming at least 29 lives as of Feb. 4. The Palisades fire — the first to

erupt — engulfed over 23,000 acres and devastated surrounding communities. Four weeks later, both the Palisades and Eaton fires are now fully contained. But they rank among the deadliest and most destructive fires in California history.

While California is no stranger to summer wildfires, this January outbreak was an extreme outlier, fueled by unusually severe fire weather conditions across the state's southern region. It will take time to unravel the many factors contributing to the situation. Yet it is a stark reminder that climate change is making wildfires more frequent, intense and destructive than ever before — with individual lives, homes and businesses paying the price.

Data on WRI's Global Forest Watch platform shows just how uncommon these fires were, and how fire trends are changing as the planet warms.

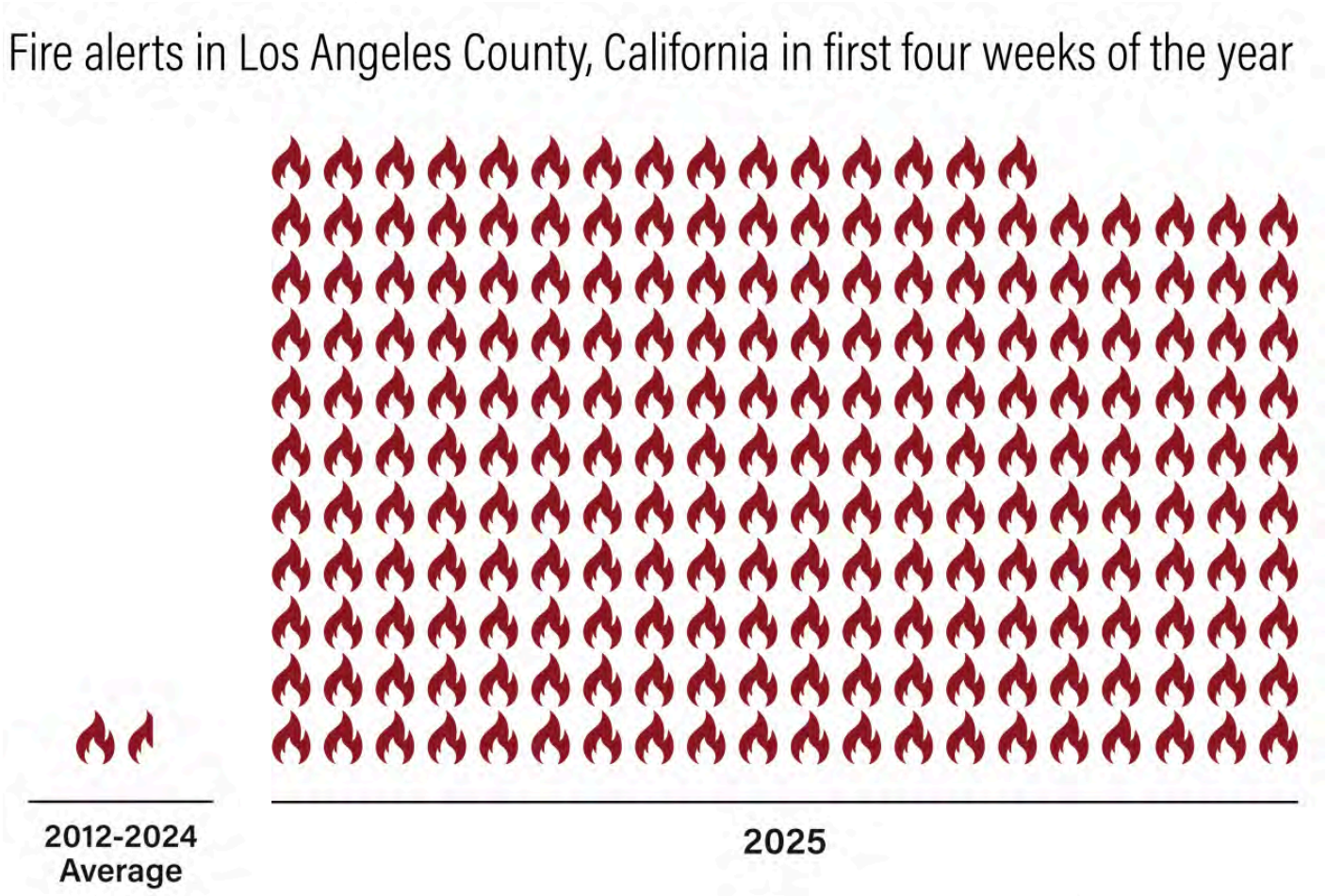


Large Wildfires Are Rare in California this Early in the Year

Fire alerts, which use satellite data to detect fires based on the heat they generate, rose quickly as fires spread across Los Angeles County. Over 200 fire alerts were detected in the area between Jan. 7 and Jan. 22 — more than 130 times the average for the first four weeks of the year from 2012-2024. (No new high confidence fire alerts were detected between Jan. 22 and Feb. 4.)

During most years, no fire alerts are detected in Los Angeles in the first three months of the year, let alone the first few weeks. Only one other year, 2021, had more than 10

fire alerts in Los Angeles between January and March. That year went on to become one of California's most devastating for wildfires.



In California, wildfire season typically starts in June and continues through October, when the weather is hot and dry. Weather conditions change toward the end of the year, bringing rainfall to much of the state. Cool temperatures and rain during the winter months typically keep wildfire activity low.

This year, the rain came late in Los Angeles. Following a summer of record-breaking temperatures and extreme heat, rainfall between October and January was far below normal for the time of year: only about 4% of the typical amount. This lack of rainfall,

combined with strong and dry Santa Ana winds, created the right conditions for a surge in fire activity.

Fire Activity Is on the Rise in California

While these early season fires are rare, forest fires in general have become increasingly devastating for Californians over the past two decades, threatening lives and communities from Napa County in the north to San Diego in the south.

Fire is, on average, the largest driver of tree cover loss in the state. In 2020 and 2021, California lost a record amount of tree cover to fire: over 700,000 hectares (1.73 million acres), or more than 5 times the area of Los Angeles. These wildfires had catastrophic impacts; claiming lives, creating hazardous air quality, ravaging ecosystems and causing billions of dollars in property damage.



What's Fanning the Flames?

The increasing frequency and intensity of wildfires in California can be attributed to both natural and human-induced factors, with climate change playing a central role.

Rising global temperatures have created hotter, drier conditions across the landscape. This makes fires not only more likely to ignite but also easier to spread. The hottest years on record globally — 2023 and 2024 — have seen extreme heat intensify droughts and dry out vegetation, creating an ideal fuel source for wildfires.

Indeed, one recent study estimated that climate change made L.A.'s January fires 35% more likely to occur.

Average annual temperatures are increasing in California

Source: NOAA National Centers for Environmental Information (NCEI)
Note: 2024 is year to date

WORLD RESOURCES INSTITUTE

Southern California is also frequently affected by the Santa Ana winds, which bring strong, dry gusts that further fuel the fires and make containment difficult. This combination of heat, dryness and wind is compounded by the fact that communities are increasingly being built near vegetated areas (known as the "wildland-urban interface"), putting both people and their built environment at greater risk. As average temperatures in California continue to rise, so does its vulnerability to catastrophic fires.

Increasing Wildfires Are Both a Local and Global Challenge

The increasing size and severity of wildfires in California is not an isolated event. Climate change is making wildfires more frequent and intense around the globe, resulting in larger forest fires worldwide. Hot and dry weather conditions brought on by climate change result in longer and more severe fire seasons and make bigger areas more prone to wildfires.

With each fraction of a degree of warming, the risk of wildfires significantly increases. As one of the primary risk factors associated with wildfires, it is critical that countries work together to reduce carbon emissions and keep global temperatures below the threshold set by the Paris Climate Agreement.

Meanwhile, communities on the frontlines don't have to wait for a global climate response. There are steps they can take now to reduce wildfire risks and protect residents, such as restoring degraded forests and using controlled burns and other strategies to reduce fire fuel.

New models to pay for these activities are emerging across the U.S. In California, Forest Resilience Bonds developed by Blue Forest and WRI raised $29 million for restoration and wildfire risk reduction across 63,000 acres in the Sierra Nevada mountains. Expanding such approaches in the U.S. and elsewhere can play an important role in safeguarding communities, homes and businesses from the growing threat of wildfires.

While it is too early to tell how bad 2025 will be for wildfires, we know which direction long-term trends are headed. Taking steps to protect communities and curb climate change cannot wait.

To view historical fire trends, track fire activity in 2025 and sign up to receive fire alert notifications, visit the Global Forest Watch map and platform.

Relevant Work

FORESTS

California's Wine Country Wildfires Are Among the Worst on Record

Insights OCTOBER 17, 2017

FORESTS

California Made Headlines, but 5 Other U.S. States Also Broke Wildfire Records in 2018

Insights MARCH 7, 2019

FORESTS

6 Graphics Explain South America's Forest Fires

Insights SEPTEMBER 19, 2024

CLIMATE

Weather Patterns that Fueled Great Smoky Mountains Forest Fire Could Increase with Climate Change

Insights DECEMBER 14, 2016

Tracking the damage and devastation from the Los Angeles wildfires in maps

By Renée Rigdon and Rachel Wilson, CNN

2 minute read · Updated 5:40 PM EST, Mon January 27, 2025

(CNN) — Entire neighborhoods burned to the ground. Dozens of casualties after people either couldn't leave, or chose not to flee their homes**.** The Los Angeles wildfires of 2025 have left incredible devastation in their wakes.

Although official damage assessments are still ongoing, the California Department of Forestry and Fire Protection estimates that more than more than 16,200 structures have been damaged or destroyed in the Palisades and Eaton fires.

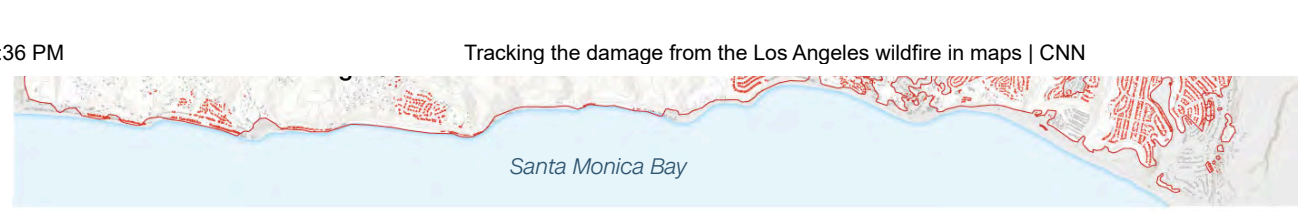
RELATED ARTICLE
Visualizing the Los Angeles wildfires in maps and charts

The Palisades Fire has been the largest in terms of burned areas. The iconic Malibu restaurant Moonshadows was completely destroyed, as was the Palisades Branch Library. The Palisades Charter High School suffered extensive damage. Here's an analysis of the building damage with what we know now:

Thousands of buildings likely damaged or destroyed in Palisades Fire

At least 4,900 buildings were damaged or destroyed in the Pacific Palisades and Eastern Malibu areas, according to an analysis of January 21 satellite imagery by CUNY and Oregon State University.





Data as of 5:52 a.m. PT on January 21, 2025

Sources: Damage analysis of Copernicus Sentinel-1 satellite data by Corey Scher of CUNY Graduate Center and Jamon Van Den Hoek of Oregon State University; Oak Ridge National Laboratory; Federal Emergency Management Agency Geospatial Response Office USA Structures; California Department of Forestry and Fire Protection (fire perimeter)
Graphic: Renée Rigdon, CNN



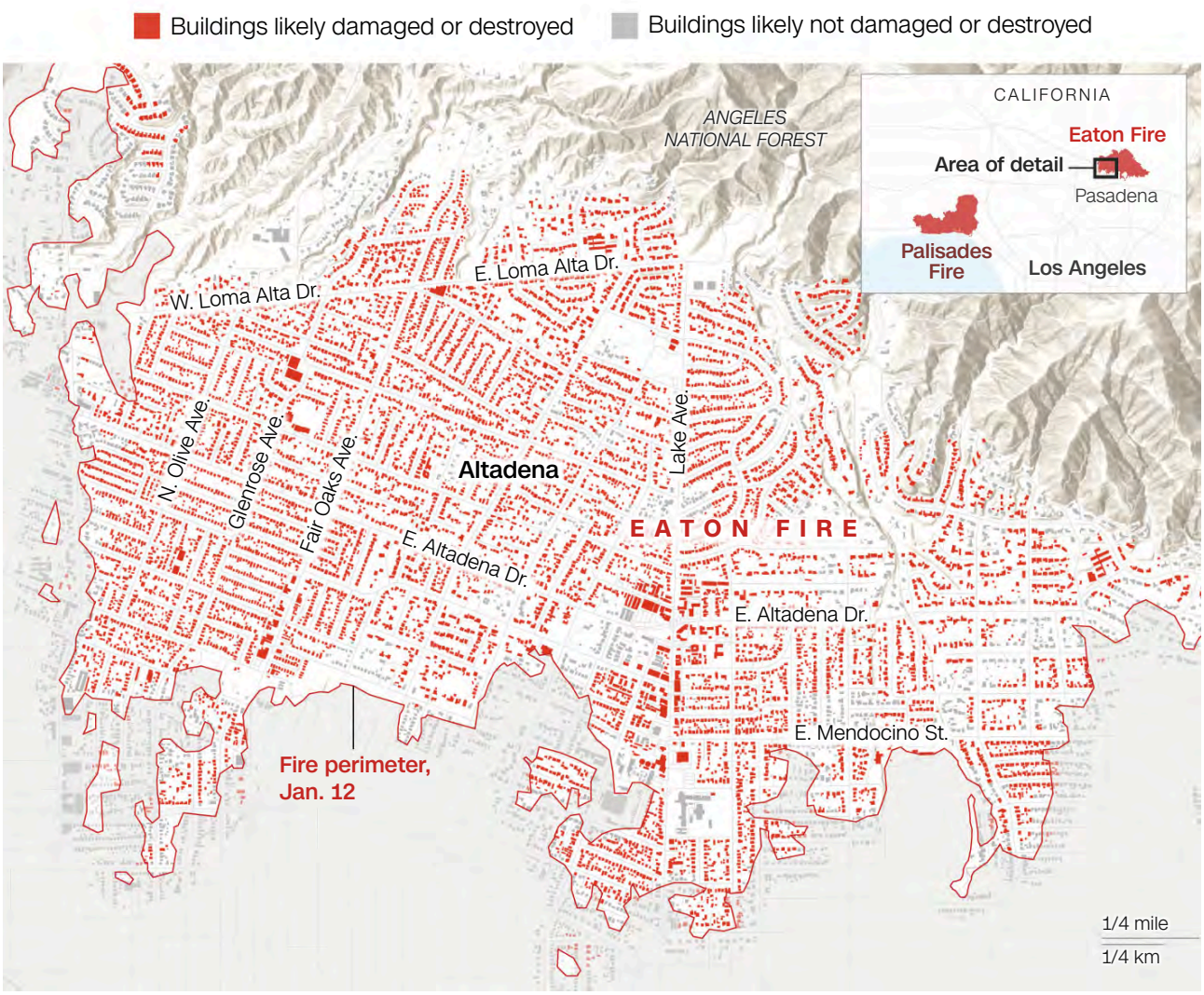
Kevin Marshall sifts through his mother's fire-ravaged property in the Pacific Palisades neighborhood of Los Angeles on Saturday. John Locher/AP

The Eaton Fire, while smaller in perimeter than the Palisades Fire, has likely claimed more buildings, estimates suggest. Here's an analysis of what we know about the damage to Los Angeles County's hard-hit Altadena neighborhood:

At least 7,000 buildings damaged or destroyed by the Eaton Fire

At least 7,900 buildings damaged or destroyed by the Eaton Fire

Most of these buildings are in the Altadena, California, area, according to an analysis of January 21 satellite imagery by CUNY and Oregon State University.

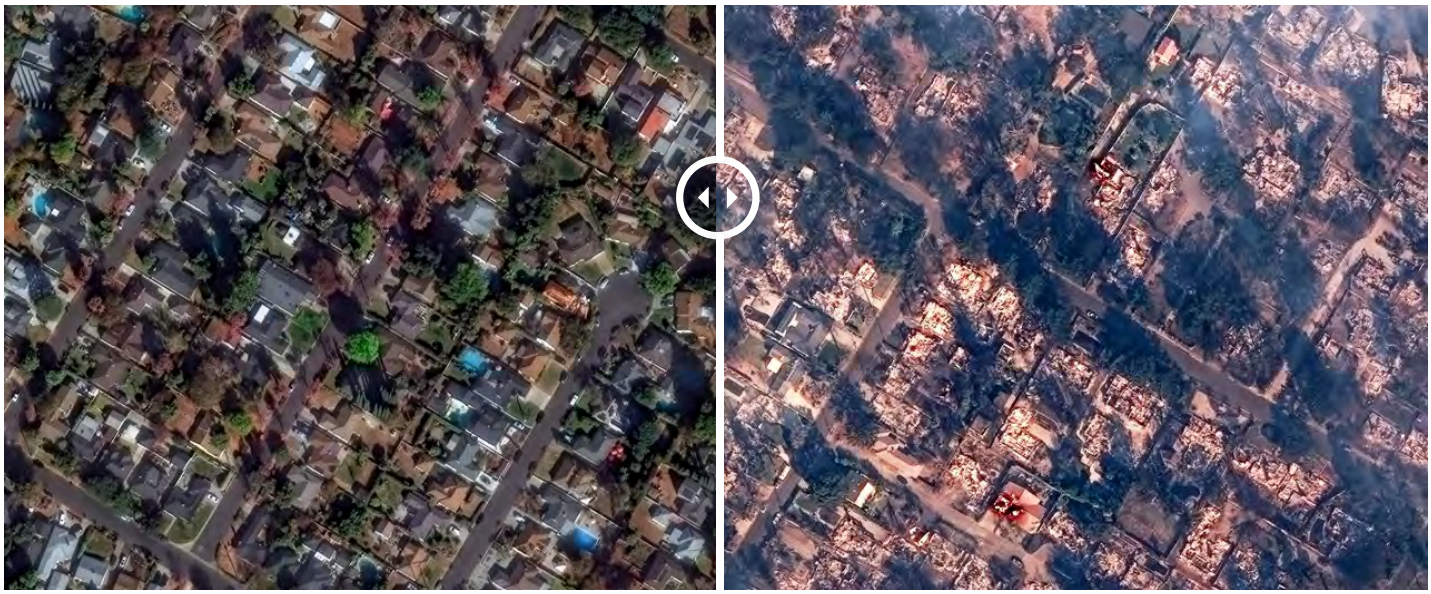


Data as of 5:52 a.m. PT on January 21, 2025

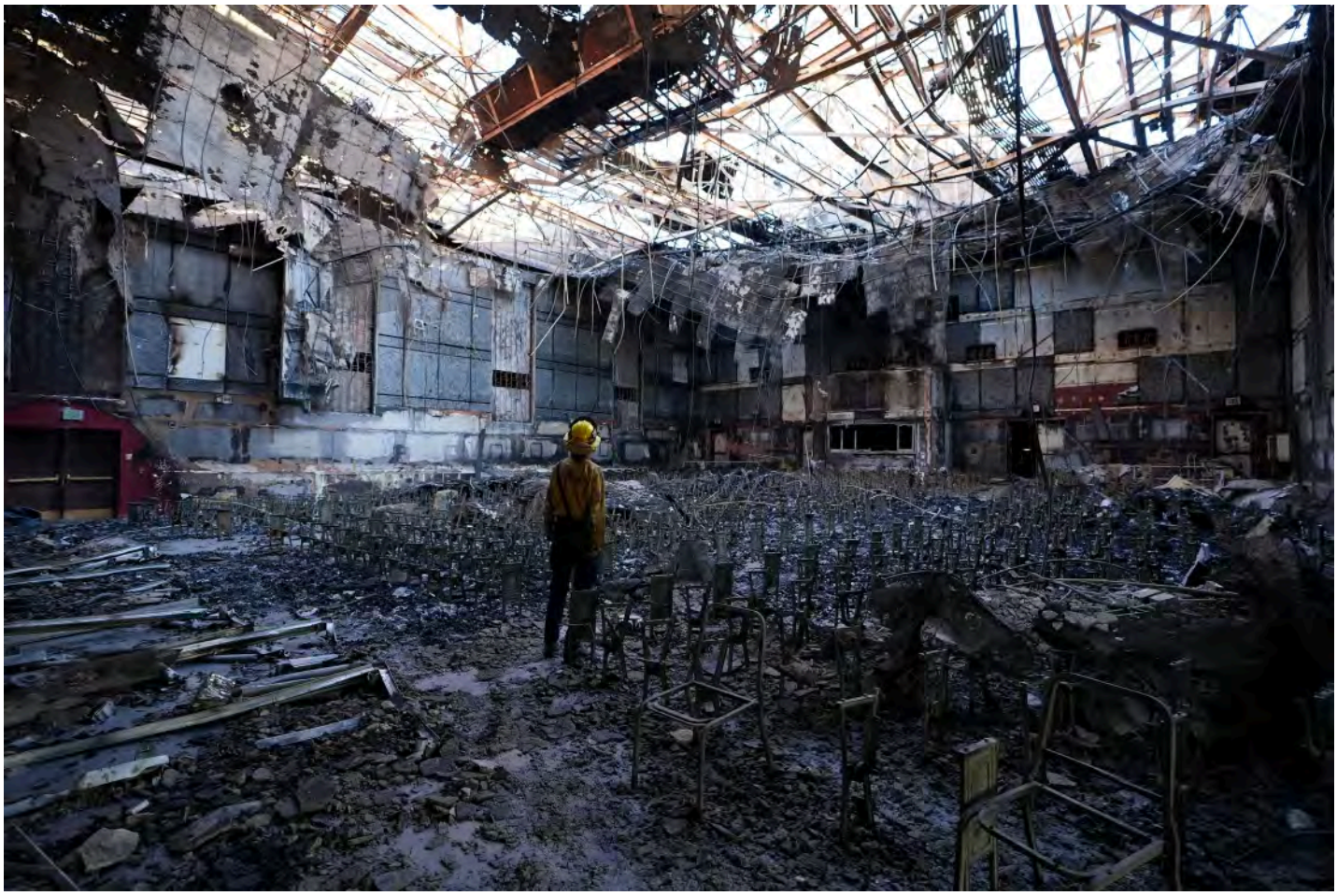
Sources: Damage analysis of Copernicus Sentinel-1 satellite data by Corey Scher of CUNY Graduate Center and Jamon Van Den Hoek of Oregon State University; Oak Ridge National Laboratory; Federal Emergency Management Agency Geospatial Response Office USA Structures; California Department of Forestry and Fire Protection (fire perimeter)
Graphic: Renée Rigdon, CNN

See satellite images, from Maxar, of part of Altadena before and after the Eaton Fire ravaged the area.





Destroyed structures in Altadena, California Satellite image ©2025 Maxar Technologies



A firefighter stands in the burnt down auditorium of the Eliot Arts Magnet Academy in Altadena on Sunday. Lokman Vural Elibol/Anadolu via Getty Images

The severity of the LA fires has also highlighted that many US communities have limited emergency evacuation plans in place. After the Palisades Fire first sparked on January 7, many residents in the Pacific Palisades neighborhood struggled to get out because of traffic bottlenecks, with some forced

to abandon their cars and flee on foot. Small communities can be especially at risk: Hundreds of towns were identified as having limited evacuation routes, according to an analysis by Streetlight Data, an analytics service that tracks transportation data.

Limited routes out of the Pacific Palisades caused evacuation chaos

Close to 25,000 people live in Pacific Palisades in Los Angeles. Almost 4,000 reside in the northern area of the neighborhood around The Summit community, which jammed traffic when a mass of people tried to exit taking Palisades Drive on January 7 when the wildfire first started.



The Palisades and Eaton fires have already climbed to the top of the list of most destructive fires in LA County history, and currently sit in the No. 3 and No. 4 slots on the list of most destructive wildfires in California state history, since at least 1991.

Palisades and Eaton fires are the most destructive to ever hit Los Angeles County

The two fires rank among the top five most destructive fires in California's history, having destroyed at least 12,000 structures, according to Cal Fire. They have burned more than 37,800 acres (approximately 59.1 square miles) in just over a week.

Top 10 most destructive California wildfires by number of destroyed structures

Name	County	Destroyed structures ▼
Camp Fire, 2018	Butte	18,804
Eaton Fire, 2025* Active	**Los Angeles**	7,000
Tubbs Fire, 2017	Napa, Sonoma	5,636
Palisades Fire, 2025* Active	**Los Angeles**	5,000
Tunnel Fire, 1991	Alameda	2,900
Cedar Fire, 2003	San Diego	2,820
North Complex Fire, 2020	Butte, Plumas, Yuba	2,352
Valley Fire, 2015	Lake, Napa, Sonoma	1,955
Witch Fire, 2007	San Diego	1,650
Woolsey Fire, 2018	Los Angeles, Ventura	1,643

*Numbers are preliminary and based on aerial assessments that detect heat signatures. These may include not only homes and businesses but also outbuildings, such as sheds, chicken coops, or motorhomes.

Data as of Jan. 14, 2025

Source: California Department of Forestry and Fire Protection

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What's the latest on Los Angeles wildfires and how did they start?

14 January 2025

James FitzGerald
BBC News

Watch: LA County District Attorney releases footage of LA looters and arson suspect arrest

At least 25 people have died in the Los Angeles fires as two major blazes continue to burn across the sprawling US city.

Firefighters made progress over the weekend in containing the Palisades and Eaton fires but warn that the return of high winds - forecast until Wednesday - could see these two spread again, or fuel new ones.

The fires are already among the most destructive in LA's history when measured by the number of buildings destroyed. Rebuilding work will cost "tens of billions" of dollars, US President Joe Biden has said.

What's the latest?

An area to the north-west of the city centre is described by officials as "particularly dangerous".

A red flag warning - indicating a high level of fire danger - is in place until 18:00 (02:00 GMT) on Wednesday, with the strongest Santa Ana winds expected on Tuesday.

Nearby, the largest fire is in the Palisades area, and has burnt through more than 23,000 acres. It is still only about 14% contained, despite the efforts of thousands of firefighters.

The blaze is moving east, threatening the exclusive neighbourhood of Brentwood, home to the Getty Center, a world-famous art museum that has evacuated its staff.

- Follow live updates
- What are the Santa Ana winds?
- LA fire victims fear new housing crisis

Another fire, Eaton, is more deadly than Palisades so far - responsible for 16 of the deaths.

The overall destruction is immense, with more than 12,000 structures - homes, outbuildings, sheds, mobile homes and cars - destroyed. Celebrities Mel Gibson and Paris Hilton are among those who have lost their homes.

Tens of thousands of homes are also without power.

The fires could turn out to be the costliest in US history, with damage projected at up to $150bn, according to a preliminary estimate by AccuWeather.

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Where are the fires?

There are three active fires in the wider area, while a smaller fire is nearly contained, say California fire officials:

- **Palisades**: The first fire to erupt a week ago and the biggest in the region. It has scorched more than 23,000 acres as of Tuesday, including the upmarket Pacific Palisades neighbourhood, and is only 14% contained
- **Eaton**: Affecting the northern part of LA, blazing through areas such as Altadena. It is the second biggest fire in the area, burning more than 14,000 acres. It is now 33% contained

- **Hurst**: Located just north of San Fernando, it began burning last Tuesday. It has grown to 799 acres, but is almost fully contained
- **Auto:** Broke out on Monday. It has reportedly been stopped from moving forwards after spanning 56 acres, according to Ventura County officials

The earlier Kenneth, Archer, Sunset, Lidia, Woodley and Olivas fires have been contained.

What does it mean for a fire to be contained?

Containment describes the progress firefighters make in controlling the spread of flames. It is often listed as a percentage. For example, if a fire is 14% contained, that means fire crews have established barriers around 14% of the fire's perimeter.

Natural barriers include roads, rivers and oceans. Firefighters can also create barriers using equipment such as bulldozers, hoses and shovels to remove vegetation down to the bare soil, meaning there is nothing for the fire to burn.

A fire being 100% contained doesn't mean it has been extinguished, but rather that the flames have been fully encircled and the spread has been effectively stopped.

- Maps and images reveal scale of LA wildfire devastation
- What we know about the victims

What caused the fires?

Detectives continue to investigate the possible causes.

Lightning - the most common source of fires in the US - has been ruled out as a cause for the Palisades and Eaton fires.

There has been no official indication so far that arson or utility lines - the next two biggest culprits in sparking fires - caused any of the conflagrations.

However, in the case of the Eaton fire, legal cases have been filed against the electrical company, Southern California Edison Company (SCE), claiming there is evidence that the blaze - one of the largest - was ignited due to negligence of the firm's overhead wires.

SCE has vowed to "review the complaint when it is received", pointing out that "the cause of the fire continues to be under investigation".

A spokeswoman added that the company "remains committed" to supporting communities affected by the fires.

On Friday, SCE said authorities were investigating whether its infrastructure was involved in the ignition of the separate Hurst fire.

- 'I have nothing to go back to': BBC reporter loses home
- How one street went up in flames

California's very wet years of 2022-23 brought about a huge growth of vegetation, which dried out in the drought of last year, creating abundant kindling.

Conditions have been ripe for wildfires thanks to a combination of an exceptionally dry period - downtown LA has only received 0.16 inches (0.4cm) of rain since October - and powerful offshore gusts known as the Santa Ana winds.

Was LA prepared for the fires?

A political row about the city's preparedness has erupted after it emerged some fire crews' hoses ran dry.

California Governor Gavin Newsom has called for an independent investigation into the loss of water pressure to hydrants and why the Santa Ynez Reservoir was closed for maintenance and empty when the fire broke out.

"Losing supplies from fire hydrants likely impaired the effort to protect some homes and evacuation corridors," he wrote.

- Fact-checking criticism of California Democrats over fires

LA Mayor Karen Bass, who was on a previously arranged trip to Ghana when the fires began, has faced intense questions about the region's preparedness and the water issues. On Saturday, she deflected questions about her handling of the emergency.

Before the fires broke out, the city of LA's fire chief warned in a memo that budget cuts were hampering the department's ability to respond to emergencies. But another official, the LA County fire chief, denied his department had been unprepared.

Watch: Before and after footage reveals scale of damage after LA wildfires

What role has climate change played?

Although strong winds and lack of rain are driving the blazes, experts say climate change is altering the background conditions and increasing the likelihood of such fires.

Much of the western United States including California experienced a decades-long drought that ended just two years ago, making the region vulnerable.

"Whiplash" swings between dry and wet periods in recent years created a massive amount of tinder-dry vegetation that was ready to burn.

- Climate 'whiplash' linked to raging LA fires

US government research is unequivocal in linking climate change to larger and more severe wildfires in the western US.

"Climate change, including increased heat, extended drought, and a thirsty atmosphere, has been a key driver in increasing the risk and extent of wildfires in the western United States," the National Oceanic and Atmospheric Administration says.

Fire season in southern California is generally thought to stretch from May to October - but the Governor Newsom has pointed out earlier that blazes are now a perennial issue. "There's no fire season," he said. "It's fire year."

- A simple guide to climate change

- Why LA is so hard to evacuate

How long will the fires last?

No one can say when the Los Angeles fires will finally go out. The city is bracing for continued burning and a possible spread amid the latest wind warnings.

The Santa Ana winds that fanned the flames are set to strengthen, with strong gusts on Tuesday before the severity is expected to drop. There are now new red flag warnings for dangerous wind storms.

The other conditions that fed the fire - dry brush and lack of precipitation - continue as well.

Have you been affected by the fires in California? **Get in touch here.**

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SCIENCE | FEBRUARY 5, 2025

Here’s How the Los Angeles Wildfires Are Affecting Animals, From Fish to Snakes to Birds

While scientists were able to save and move some creatures in the aftermath, researchers are worried about the prospects for other species



The coast horned lizard (*Phrynosoma blainvillii*) depends on chaparral habitat to survive. It has declined across much of its range due to habitat loss, whether from development or invasion of non-native grasses. After fires, non-native grasses often fill in habitat and create problems for the species. Anton Sorokin

Anton Sorokin

On January 23, dozens of biologists laden with electrified backpacks, nets and buckets marched into the smoldering moonscape that the Palisades Fire had created in the Santa Monica Mountains. A rescue mission was afoot, with no

time to waste—rain was coming. While moisture would help quell the fires that had been burning for weeks, water flowing over denuded slopes would wash toxic ash into Topanga Creek, suffocating much of the life within. This waterway was home to precious steelhead trout, the genetically unique southern population that persists in only a few creeks in Southern California—hence this massive and heroic deployment by the Resource Conservation District of the Santa Monica Mountains, the California Department of Fish and Wildlife, California State Parks and others. Before the day was done, the fish rescue teams trekked over miles of creek, used electrofishing and nets to nab as many fish as possible, put them in buckets, and climbed up steep slopes to trucks waiting to take the fish to safety.



Steelhead trout (*Oncorhynchus mykiss irideus*) are the ocean-going variant of coastal rainbow trout. The southern populations ranging from San Luis Obispo to San Diego are considered endangered. Anton Sorokin

In the weeks following the outbreak of the Eaton and Palisades Fires, the conflagrations engulfed neighborhoods, forested canyons and chaparral—a type of shrubland. These fires killed more than two dozen people, displaced tens of thousands of others and affected untold numbers of animals. Mountain lions bolted across roads. People outside the fire zone suddenly saw new bird species appear in their neighborhoods. Other animals, like the trout, had no option except to shelter in place. For some long-lived animals, this wasn't their first blaze. Intense fires that historically happened once in generations are now so commonplace that a humble California newt, which typically lives for 10 to 20 years, may have already lived through multiple blazes. Together, we have witnessed the kindling of an epoch that some environmental scientists have dubbed the Pyrocene, characterized by the frequency and intensity of its fires exacerbated by climate change.

Ironically, the seasonal drought that had turned Los Angeles County into a tinderbox kept many reptiles and amphibians safe initially. As rain never arrived, amphibians failed to become active and emerge from underground. Similarly, reptiles are less active in dry winter conditions. Many snakes and lizards must have escaped the inferno, inactive and tucked safely below. The depths would have provided refuge for some soil-dwelling invertebrates, and, for the most part, burrowing small mammals like mice and kangaroo rats should have been able to descend deep enough to avoid the heat.

Unfortunately, for some animals neither fleeing nor sheltering underground was an option. Topanga Canyon was the second-largest overwintering site for monarch butterflies this winter in Los Angeles County according to counts by the Xerces Society, a nonprofit focusing on the conservation of invertebrates. The monarchs, having completed a long migration from the Rocky Mountains to coastal California, picked a cool, shady spot to aggregate until spring. Flames encroached on the trees where butterflies roosted and, while the tree grove

remains standing but singed, the status of butterflies is unclear. In a year with low returns across California, the loss of any monarchs is a harsh blow.



Overwintering western monarch butterflies (*Danaus plexippus*) aggregate in cool, shady groves in coastal California. Scientists aren't sure exactly how the fires affected the butterflies, but they worry many of the insects may not have been able to escape in time. Anton Sorokin

Scott Black, a conservationist and executive director of the Xerces Society, is hopeful some butterflies, both monarchs and other species, may have escaped. But, he acknowledges, "Some insects might be able to fly away, but I doubt it. I really doubt that almost any butterfly or bee could escape them when these fires were raging. I can't imagine. These fires came in fast." After the blazes, Black laments the fate of the less mobile invertebrates. "Springtails, aphids, planthoppers or parasitoid wasps. … Studies show that they're basically just gone from the sites."

Jann Vendetti, the associate curator of malacology at the Natural History Museum of Los Angeles County, is also hopeful some of the threatened shoulderband snails she studies have sheltered and survived, but she says that native snail response to fire is understudied. "[A population] becomes extinct before we even know it ever existed, because who was studying that tiny population?" says Vendetti, noting few other scientists look at snails, and not enough to investigate each population. "And then fire went through, and its gone." On the bright side, Vendetti adds, the shoulderbands are hermaphroditic, so it just takes any two to reproduce. If the habitat is still there and some snails are left, they can start to repopulate. However, if they're all gone, recolonization is unlikely given snails' limited ability to travel. And that would be a shame, she says: A high proportion of native Californian land mollusks are already threatened, and this would be another blow.

Some larger mammals and birds had a chance to escape advancing flames, but even they would have been exposed to smoke. Olivia Sanderfoot, an ecologist at the La Kretz Center for California Conservation Science at the University of California, Los Angeles, emphasizes that smoke from this wildland-urban interface is not just any smoke: "Air pollution from more urban fires is going to have a greater health impact on birds, just as it is expected to have a greater impact on people because of all the particulates in the smoke that are so much more toxic given what's gone up in flame: plastic, tires, flame retardant." Sanderfoot, who studies the effects of smoke inhalation on birds, says that bird lungs are particularly efficient at moving air, but that this efficiency comes at the cost of making them particularly vulnerable to inhaled particulates. As miners had canaries in the coal mine to warn of bad air, paying attention to birds in the Pyrocene will help us better understand the physiological effects of smoke inhalation. "Thinking about smoke is very new, and it's increasingly critical that we really think about this disturbance because it's impacting people and wildlife alike in new and profound ways," says Sanderfoot.



Anna's hummingbird (*Calypte anna*) is the most common hummingbird species in the areas affected by the L.A. fires. Anton Sorokin

Following smoke exposure, Sanderfoot has observed birds in poorer body condition and underweight, even far from the actual fires themselves. Early evidence suggests that even one bad smoke event could affect people and animals for the rest of their lives, says Sanderfoot, diminishing lung capacity and leading to strings of health effects. Birds are a varied group: Some species choose to stay and bear the brunt of smoke, while others leave. Project Phoenix enlists volunteers across western states to keep tabs on birds before, during and after fire events to ascertain how bird distributions are affected by smoke.

As animals return and remerge into the scorched habitat, some, like coyotes and birds of prey, could initially favor the burned regions. Catching prey is easier with less vegetation. Thinking of animals that may benefit, Kendall

Calhoun, an ecologist at the University of California, Los Angeles, recalls camera-trapping burned areas, "Black-tailed jackrabbits are good at adjusting to open landscape and grassland," he says. "We would see that they were kind of everywhere after the fire." Medium-sized animals like skunks, bobcats and foxes also did not vanish. They're at least able to maintain usage of the areas that burned, although potentially in different ways and taking advantage of different resources, but they're around, says Calhoun.



Bobcats (*Lynx rufus*) are secretive predators that occur in the areas affected by and around the Palisades and Eaton Fires. Anton Sorokin

But immediately, the lack of shade will harm sensitive animals most prone to drying out, like mollusks and amphibians. This also means less cover for ambush predators, like mountain lions. In the aftermath of the 2018 Woolsey Fire, lions struggled to hunt, faced starvation and transversed wider and wider swaths of habitat, frequently risking road crossings. The behavioral shift was

observed for well over a year post-fire. Calhoun studied deer response to wildfire and found that they also increased the size of their range and initially avoided the burn scars, but they eventually moved back into the area. "In the interim, a lot of larger animals, like mountain lions and deer, might be displaced," he says. "Where that could cause issue is if they're just displaced into people's spaces and maybe increase conflict between some of these mammal species and people."

Back in Topanga Creek, following a grueling 12-hour day of fish rescues, 271 trout were saved. Additionally, over 500 tidewater gobies were saved from a lagoon at the base of the creek in a separate effort. The trout were taken to Fillmore Hatchery, which, in a cruel twist, came under threat from the Hughes Fire almost immediately. Luckily, in the end, another move was not necessary. For the trout and gobies, this isn't just a brief sojourn; after mudslides into the creek, it might be years until they can return home. Meanwhile, the Resource Conservation District of the Santa Monica Mountains is raising funds to help cover the costs of keeping them alive.

The coming years will be tough for stream-breeding amphibians like threatened red-legged frogs and California newts, observes Greg Pauly, the curator of herpetology at the Natural History Museum of Los Angeles County. While they won't immediately suffocate like fish from the influx of ash and mud, they need deep breeding pools. The amphibians have no choice but to hunker down and wait for the stream to naturally clear sediment before breeding, a process that can take years even with no additional fires to create stream-clogging sediment. Pauly wonders, "Will we see enough habitat recovery in time? Can populations hold out long enough that there's still individuals to repopulate once conditions get better?"



After fire in a chapparal ecosystem, little shade remains, and the sun bakes the ground. The chaparral is fire-adapted and will eventually grow back—if faster-growing invasive grasses do not take over. Anton Sorokin

Another danger to native species in coming months and years are invasive grasses. The coast horned lizard is a species Pauly is particularly concerned about. Already this species has become uncommon in the region. The horned lizards rely on chaparral. After burning, the chaparral is slow to recover, whereas invasive grasses are quick to move in. While it looks dense, chaparral is open close to the ground. Pauly likens a lizard in healthy chaparral to a human running through the open understory of a redwood forest. Once the grass springs up, it creates vegetative mats, impeding movement and limiting animals' ability to forage, thermoregulate, find mates and escape predators. The rapid growth of invasive grasses hinders many groups of small animals that might otherwise flourish in a post-fire landscape, driving population declines and local extinctions. Adding salt to the wound, the profusion of

grasses also creates a significant fuel source, shortening the gaps between fires.

Scientists are still learning how animals cope with fires, especially in urban settings. But concerned community members can help increase understanding, and local scientists confirm the need for community science following fires. Once it's safe to return, the Natural History Museum's Vendetti says, "It would be fascinating to go to some of the burned areas and just kind of take stock. … We can go to sites where these species were recently. … Do we see nothing? Are they still there?"



The ensatina salamander (*Ensatina eschscholtzii eschscholtzii*) spends its life on land but is sensitive to aridification and loss of ground cover. Anton Sorokin

Wherever a person's interests lie—mammal, bird, bug or slug—a community science effort exists for them that will provide scientists with important data

regarding animals' reactions to fires. The collected data will shed light on how species adapt and recolonize—or don't. These efforts harnessing community science power include: Project Phoenix for birds, Snail Search to see what snails are active and where, Xerces Society's Western Monarch Milkweed Mapper, Bumble Bee Atlas, and iNaturalist for all wildlife in and around the burn zone.



The California kingsnake (*Lampropeltis californiae*) is a recognizable species in and around Los Angeles.
Anton Sorokin

The reality of climate change and living in the West is that fires are going to keep happening. The big question going forward, says the Xerces Society's Black, is, "How do we have diverse landscapes that both provide for biodiversity and minimize potential for fire?"

Bird conservationist Sanderfoot echoes the sentiment and reminds people: "There is an opportunity in L.A. right now to think about the way we rebuild, to live in harmony with the wildlands we are blessed with and the wildlife that brings us joy."

"I wish people would care more about the fires and smoke when the skies are clear," she adds. "This is something that requires our attention year-round."

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Anton Sorokin

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CALIFORNIA WILDFIRES

The LA County fires devastated homes in the wildland urban interface. Here's what that is



BY JEREMIA KIMELMAN
JANUARY 28, 2025

Republish



The burning hills of Mandeville Canyon as the Palisades Fire continues to spread in Los Angeles on Jan. 10, 2025. Photo by Jules Hotz for CalMatters

IN SUMMARY

A CalMatters analysis has found that as of 2020, nearly 14 million Californians lived in the sprawling 7-million-acre zone that makes up the wildland urban interface. And when fires sweep through it, they often leave destruction.

In just a single month, 2025 is the second most destructive fire year in California history, with more than 16,000 homes and other structures damaged or destroyed by two fires in the Los Angeles area. Most of those structures were in neighborhoods where the boundaries between human development and natural landscapes blur — the area fire officials and researchers call the wildland urban interface or WUI (woo-ee).

When a wildfire approaches one of these areas, the results can be hazardous as a fire can transition from consuming trees, shrubs and plants to devouring homes and other structures often constructed in ways that are vulnerable to burning. And it's also where California has been building homes for decades — nearly 45% of homes built between 1990 and 2020 are located in places with lots of vegetation ready to fuel a fire.

A CalMatters analysis has found that as of 2020, nearly 14 million Californians, or 1 in 3, lived in the sprawling 7-million-acre zone that makes up the WUI. And this isn't just a problem for Californians living in rural parts of the state: All 58 counties in California have WUIs, along with many areas across the country. The WUI grows by about 2 million acres per year nationwide, according to the U.S. Fire Administration.

The wildland-urban interface in California has grown over the last 30 years



Source: Silvis Lab, University of Wisconsin-Madison • Embed • Download image

Sarah McCaffrey, a social scientist who worked for the U.S. Forest Service for decades, put it another way: Structural fires and wildland fires — and the interface is where the two come together.

Just because a development is located within the WUI doesn't mean a fire will occur there, but there may be deadly and destructive consequences if one does. While under 3% of the statewide WUI has been affected by wildfire in the last decade, thousands of homes in the zone have been destroyed, according to a CalMatters analysis.

> **“I think sometimes it’s more useful to talk about building in high wildfire hazard places.”**
>
> — JUDSON BOOMHOWER, ASSISTANT PROFESSOR IN THE ECONOMICS DEPARTMENT OF UC SAN DIEGO, ON THE WILDLAND URBAN INTERFACE

Since 2018, Cal Fire, the state’s fire agency, has inspected all of the buildings within 100 meters of a fire perimeter and assessed the level of damage. The most destructive fires in California history have largely damaged or destroyed homes within the WUI, including the two largest fires in Los Angeles County this year – the Palisades and Eaton fires, which demolished entire neighborhoods and **killed 28 people** as of Jan. 24.

The Eaton Fire killed at least 17 people and destroyed more than 9,400 structures, roughly 9,200 of which were within the WUI as is much of Altadena, where the San Gabriel Valley rises to meet the San Gabriel Mountains. The map below shows inspections of buildings conducted by Cal Fire following the Eaton Fire along with the WUI, illustrating just how destructive a major conflagration can be for suburban areas.

The Eaton Fire

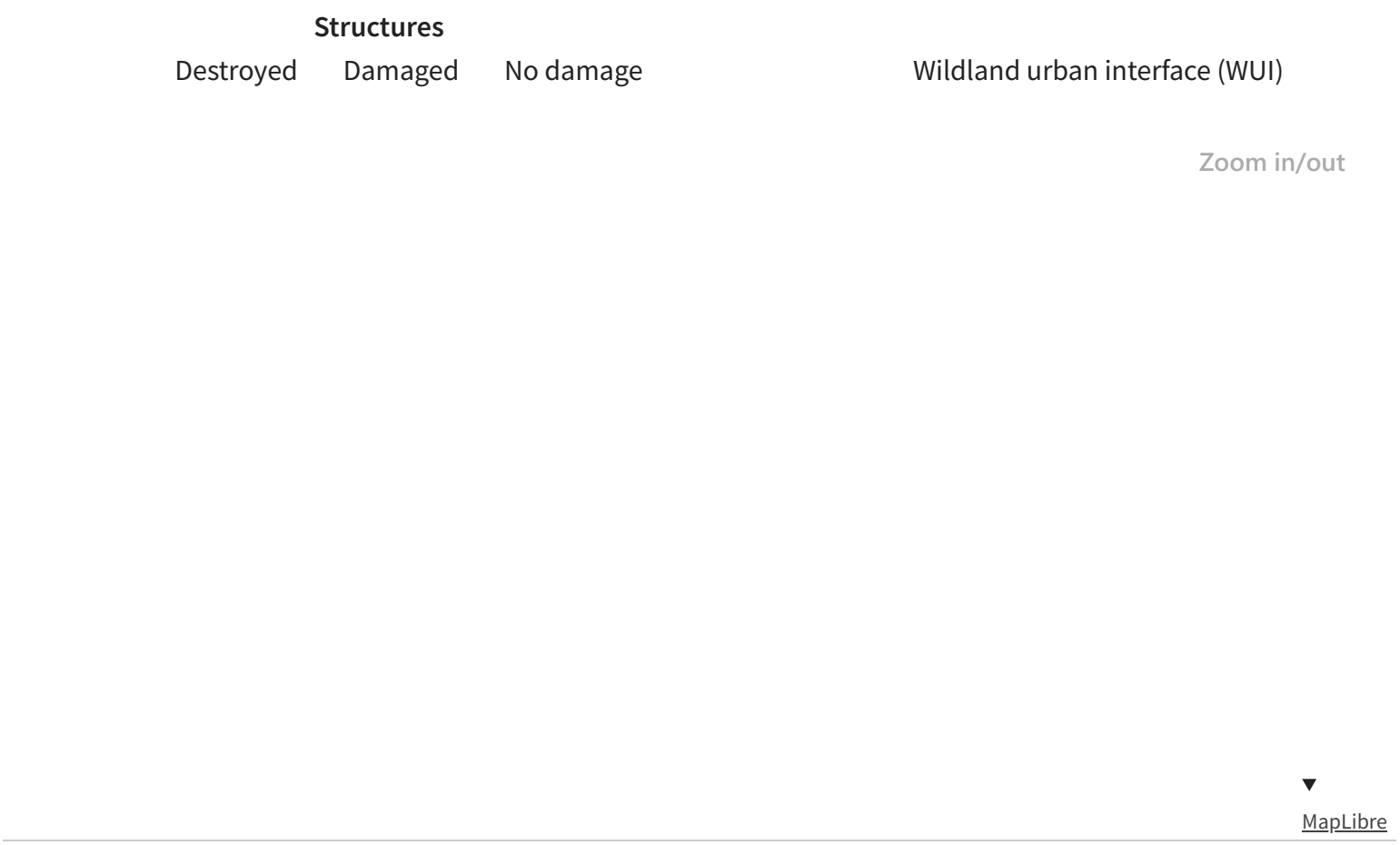
Each dot represents a structure and they are colored according to the level of destruction assessed by CalFire, the blue shape represents the wildland-urban interface.



Sources: Silvis Lab, University of Wisconsin-Madison; CalFire
Credit: Jeremia Kimelman, CalMatters

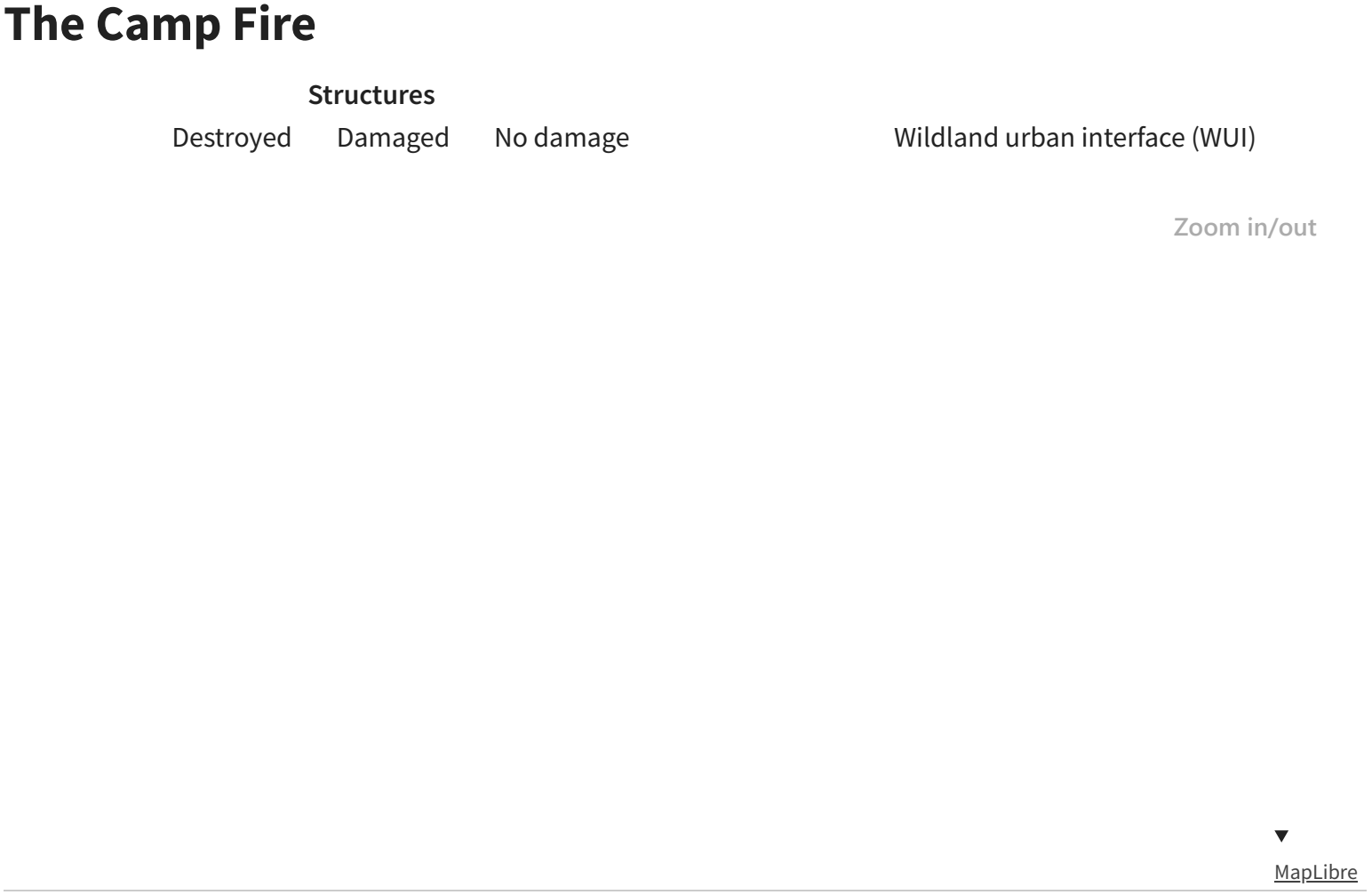
The other major fire in LA, the Palisades Fire, apparently raced down the Santa Monica Mountains towards Pacific Palisades, a coastal neighborhood in Los Angeles that is nearly entirely within the WUI. The hurricane-force winds stoked and spread the flames and destroyed at least 6,800 structures while nearly 4,100 were-undamaged.

The Palisades Fire



Sources: Silvis Lab, University of Wisconsin-Madison; CalFire
Credit: Jeremia Kimelman, CalMatters

The deadliest and most destructive fire in California history, the Camp Fire, destroyed the town of Paradise in Butte County in 2018 as the massive blaze burned both the natural and built environment. The fire damaged or destroyed nearly 20,000 structures and killed 85 people.



Sources: Silvis Lab, University of Wisconsin-Madison; CalFire
Credit: Jeremia Kimelman, CalMatters

Having a home in the WUI doesn't guarantee that it's going to burn down if a wildfire engulfs the neighborhood. Many factors contribute to that possibility, such as the year when the home was built, nearby fuel management practices that aim to reduce nearby flammable objects — and what some folks call "weather" and the rest of us call "luck." That's why there's photos of undamaged homes next to their razed neighbors after so many destructive California fires.

Despite all this, some experts say the WUI isn't the only, or perhaps even the best, way to measure fire hazard or risk because it wasn't designed for that. It can collapse nuance to narrowly focus our attention.

"There's nothing about fire risk in the WUI map," said McCaffrey. "There are some papers that show that roughly a third of houses lost in fires are not in the WUI right? But we target all our attention to the WUI."

An example of how the boundary between the wild and urban landscape doesn't necessarily translate to high fire risk is the 2017 Tubbs Fire in Sonoma County. The Coffey Park neighborhood of Santa Rosa was nearly

leveled even though it's not technically in the WUI, just next to it. The fire destroyed more than 5,000 structures and killed 22 people.

The Tubbs Fire



Sources: Silvis Lab, University of Wisconsin-Madison; CalFire
Credit: Jeremia Kimelman, CalMatters

"There's actually a legal or technical forestry definition of the wildland urban interface and it has to do with the number of structures per acre and the amount of vegetation," said Judson Boomhower, an assistant professor in the economics department of UC San Diego. "I think sometimes it's more useful to talk about building in high wildfire hazard places."

The ways to reduce the risk of fire spreading from house to house depend on the nuances of each neighborhood, particularly how densely packed the buildings are.

"If houses are, you know, 80 or 100 feet apart, then all our focus on defensible space and zone zero and all that stuff probably makes a lot more sense," said McCaffrey. "Because then, you know, it's a good chance my house could survive if I've done all this, even if my neighbor's house catches on fire."

On the other hand, some of the homes in Pacific Palisades look so close together that even ensuring that there is nothing flammable within five feet might not have prevented the spread of the fire, said McCaffrey. A **law** signed by Gov. Gavin Newsom in September 2021 required the State Board of Forestry and Fire Protection and the State Fire Marshal to make suggestions for creating an ember-resistant zone within five feet of a structure in a high fire severity zone.

State intervention has helped to reduce destruction in these more wildfire-prone areas. **Research from 2021** concluded that California homes built after 2008 were nearly half as likely to be destroyed compared to those built in 1990 if a wildfire burned through the neighborhood, largely because of improved building code regulations.

California faces a chronic housing shortage and megafires boosted by climate change, but with millions of residents already living in the wildland urban interface, state policymakers will face questions of how to protect people and where to rebuild after disaster strikes.

Do you live in or near the wildland urban interface?

Enter your address to see if you live in or within 100 meters of the so-called "WUI", an area of increased wildfire damage risk.

Type street address

We do not store your address. *Privacy Policy →*

Wildland urban interface (WUI)

MapLibre

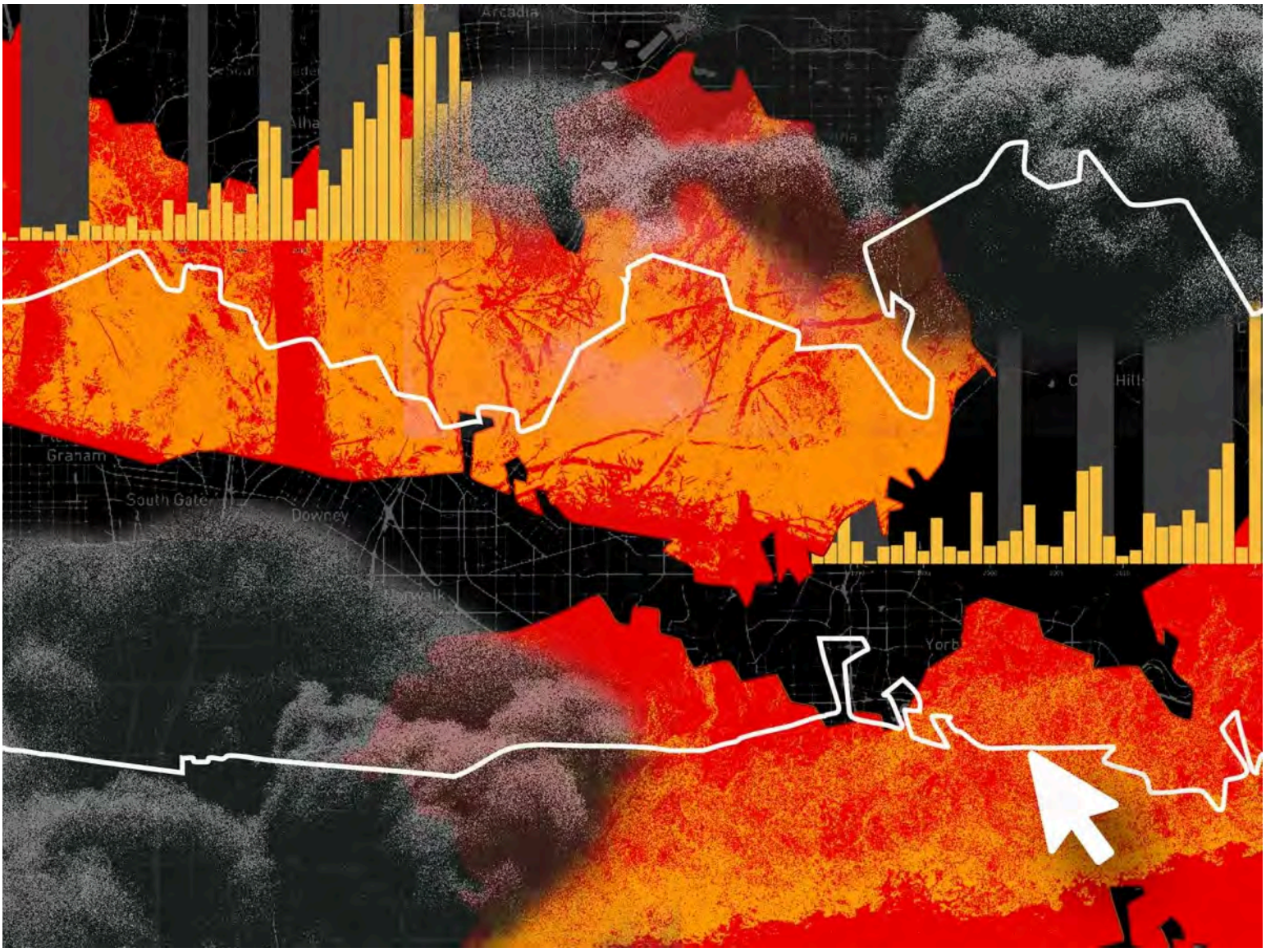
Sources: Silvis Lab, University of Wisconsin-Madison; CalFire
Credit: Jeremia Kimelman, CalMatters



Why California keeps putting homes where fires burn



Map: How big are the LA fires? Use this tool to overlay them atop where you live



Track California Fires 2025

2025 Incident Archive

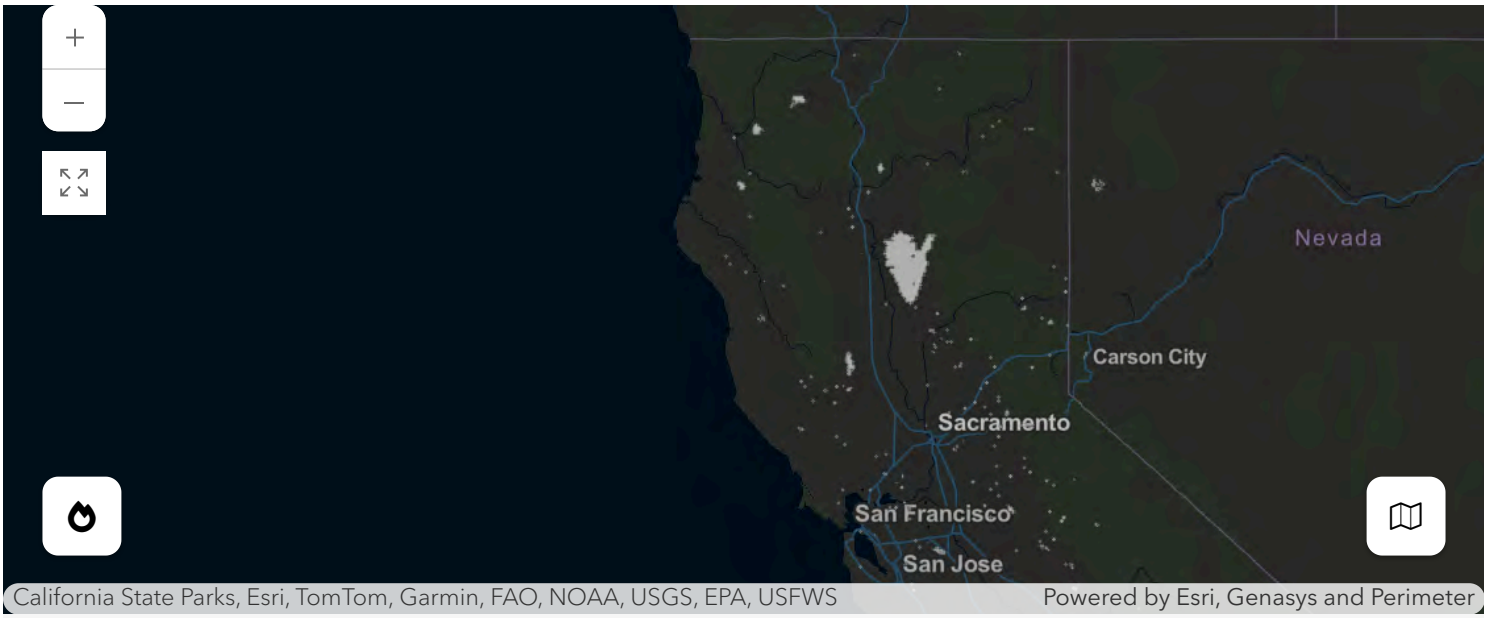
92,463
Total Emergency Responses

443
Wildfires

57,670
Acres Burned

29
Fatalities:
Preliminary pending coroner confirmation

16,251
Structures Destroyed



LAYERS

☑ Recent Perimeters ☐ Counties

Search:

Search incidents

2025 INCIDENTS

Palisades Fire	Los Angeles	1/07/2025	23,707	100%
Eaton Fire	Los Angeles	1/07/2025	14,021	100%
Hughes Fire	Los Angeles	1/22/2025	10,425	100%
Border 2 Fire	San Diego	1/23/2025	6,625	100%
Kenneth Fire	Los Angeles, Ventura	1/09/2025	1,052	100%
Hurst Fire	Los Angeles	1/07/2025	799	100%
Lidia Fire	Los Angeles	1/08/2025	395	100%
Rosa Fire	San Luis Obispo	1/29/2025	105	100%
Lilac Fire	San Diego	1/21/2025	85	100%

Laguna Fire	Ventura	1/23/2025	83	100%
Ncfr3 4 Fire	San Diego	1/21/2025	80	0%
Auto Fire	Ventura	1/13/2025	61	100%
Sepulveda Fire	Los Angeles	1/23/2025	45	100%
Sunset Fire	Los Angeles	1/08/2025	43	100%
Oak Fire	Santa Barbara	1/01/2025	42	100%
Clay Fire	Riverside	1/21/2025	39	100%
Little Mountain Fire	San Bernardino	1/15/2025	34	100%
Woodley Fire	Los Angeles	1/08/2025	30	100%
Border Fire	San Diego	1/01/2025	25	100%
Archer Fire	Los Angeles	1/10/2025	19	100%

Previous Next

3D MAP (BETA)

The information presented here reflects what is known to CAL FIRE and is updated frequently. **Learn more about data processing**



2025 Fire Season Outlook

The fire outlook for California from February through May 2025 indicates varying conditions between the northern and southern regions. In Northern California, active jet stream patterns are expected to bring near to above-normal precipitation during February and March, followed by a trend towards warmer and drier conditions in April and May. The ongoing green-up and snow cover at mid to upper elevations are anticipated to act as barriers to fire spread during this period. Consequently, significant fire potential is projected to remain normal, aligning with the historical trend of minimal large fire activity during these months.

In contrast, Southern California has experienced a drier-than-normal wet season, with most areas receiving less than 25% of average precipitation since October 1, 2024. This prolonged dryness has led to widespread severe to extreme drought conditions. As a result, there is a slight to moderate increase in the likelihood of above-normal large fire potential along the South Coast over the next four months. While the limited growth of grasses and fine fuels reduces the likelihood of fires dominated by these fuels, the risk of fires involving timber and larger fuels has increased.

Overall, while Northern California is expected to maintain normal fire potential due to favorable precipitation and fuel conditions, Southern California, particularly the South Coast, faces an elevated risk of large fires driven by ongoing drought and dry fuel conditions.

FIRE INCIDENTS BY YEAR:

ACTIVE 2024 2023 2022 2021 2020 2019 2018 2017 2016

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Current Incidents

2025 Incidents

Defensible Space

Resources

Statistics

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Board of Forestry and Fire Protection

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Equal Employment Opportunity

Fire and Resource Assessment Program

Fire Protection

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Business and Workforce Development

California Forest Improvement Program

Forest Health

Forest Legacy

Urban and Community Forestry

Wildfire Prevention

Tribal Wildfire Resilience

Wildfire Resilience

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EXHIBIT 12

Managing Eucalyptus

National Park Service
U.S. Department of the Interior

Golden Gate National Recreation Area



A Complex Challenge

Several species of non-native eucalyptus are found throughout California. *Eucalyptus globulus*, also called Tasmanian blue gum, is by far the most common. It was first introduced to the San Francisco Bay region in 1853 as an ornamental tree, and later planted widely for both aesthetic and commercial purposes. There are hundreds of acres of eucalyptus within GGNRA lands today, presenting managers with a variety of challenges.

Some eucalyptus trees within the park were part of the original landscaping plans for Fort Baker, Fort Barry and Fort Cronkhite, which are now protected as historic sites. Eucalyptus trees were also planted along many ridges as windbreaks, and later spread to larger areas. In some cases, single rows of trees have become large groves. Human communities have also expanded, and there are now many subdivisions bordering eucalyptus groves along the park's boundaries.

The fragrant oils in eucalyptus leaves can be very pleasing, but also alter soil chemistry, and can become highly flammable when the leaves accumulate as surface fuel. Studies have shown that native species are displaced in eucalyptus groves and fuel loads are higher. Without active management, historic landscapes can become overgrown, biological diversity can decline, and the potential for catastrophic wildfire can increase. Eucalyptus management at Golden Gate National Recreation Area strives to achieve three main goals—fire safety, historic preservation, and ecosystem health.



Cultural Resources

The original design for Fort Baker in 1903 called for planting 10,000 eucalyptus trees. It is not known exactly how many were planted, but it was far fewer than planned.

Management of the landscape was an ongoing concern during the historic period. An example is the 1936 WPA work party trimming trees on the Fort Baker parade ground in the photo above. In a continuing effort to preserve cultural resource values, historic trees are pruned and surface debris is removed. This is also good fire-safe practice.



Natural Resources

Coast live oak and California bay communities are often overtaken as eucalyptus groves expand outward. Coastal dunes, grasslands, wetlands, riparian vegetation, and coastal scrub have also been affected by the spread of eucalyptus.

Alterations to wind, shade, and moisture conditions that occur when a eucalyptus grove becomes established often create a vastly different habitat than native species are adapted for. Natural resource objectives for eucalyptus management aim to improve conditions for native plants and animals.



Mike Forester

Wildland Fire

Constant shedding of bark contributes to the blue gum fire hazard. The 1991 Tunnel Fire in the Oakland Hills and the 2004 Tam Fire in Tamalpais Valley demonstrated how intensely eucalyptus debris can burn.

Fire management objectives focus on hazardous fuel reduction. Priority treatments are within 100 feet of structures, both privately owned structures near the park boundary, and structures within the park. Treatments along roads which are primary emergency response routes are also a high priority.

Many Ways to Manage Eucalyptus

Eucalyptus management takes many forms. It can entail simply removing lower limbs, thinning trees, or removing entire stands. Most projects have several phases involving trees, stumps and slash.

Eucalyptus removal near developed areas is a fire management priority. Ecosystem restoration is often the ultimate goal.









Trees

Working with different sized trees requires different skills and equipment. Removing larger trees is highly technical and can be dangerous if not done properly. Trees are often removed in stages. The smaller trees are cleared to make room for felling the larger ones. Harnesses may be needed to lower the largest trees in sections. Sometimes only surface fuel and lower branches are removed, leaving the majority of the trees intact. There are three management approaches:

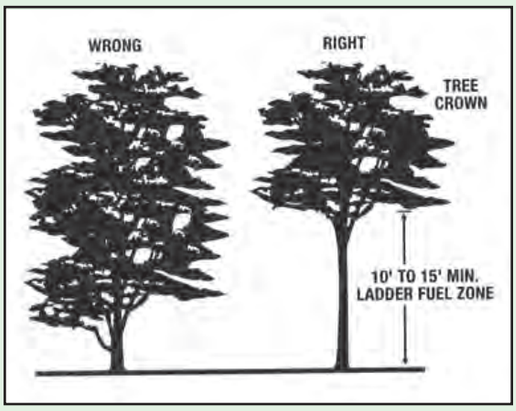
- **Understory Fuel Reduction**
  Litter and duff is burned or removed by hand.
- **Stand Thinning**
  Select trees, often the smaller ones, are removed, leaving the remaining trees evenly spaced.
- **Stand Removal**
  All trees are removed.



Above: Eucalyptus branches are hauled to a chipper during a fuel reduction project.

Below: Removing lower branches, also called limbing, increases fire safety. Clear a minimum of 10 feet off ground or 1/3 height of tree.

Illustration courtesy: California Department of Forestry & Fire Protection





East Bay Regional Parks



Stumps

Left untreated, stumps will resprout, and will need to be cut again. Stumps can be treated with herbicide around the circumference where the actively growing cambium layer is. Grinding to destroy the stump is also done, but is labor intensive and is sometimes not feasible. Tarping with heavy plastic prevents resprouting with light deprivation and a physical barrier. Many factors are considered.

Slash

Debris left over from vegetation management activities includes branches, leaf litter, and tree trunks. Larger materials may be hauled away to a composting site or a landfill, cut into logs for firewood or left intact for use in landscaped areas. Material up to 24" in diameter can be chipped and used as mulch or to generate electricity. Burning debris piles is another option and is often the most cost-effective approach.

Habitat Restoration





Left to right: Oak seedlings growing in nursery in Tennessee Valley (photo courtesy: Golden Gate National Parks Conservancy); Removal of resprouting eucalyptus at the Tam Fire Site.

Once eucalyptus is cut, an area may be vulnerable to invasions by other non-native plants. Complete site restoration involves collecting local seed, growing native plants in a nursery, transplanting seedlings, and monitoring them until they get established. While the site is being transformed, vigilant weed removal must also be in progress.

These projects take many years and provide many opportunities for public involvement.

Comments or questions? (415) 464-5133

Want to volunteer? (415) 561-4755

(rev. 09/06)

EXHIBIT 13

Government Shutdown Alert

National parks remain as accessible as possible during the federal government shutdown. However, some services may be limited or unavailable. For more information, please visit: doi.gov/shutdown (https://www.doi.gov/shutdown)

Read More (https://www.doi.gov/shutdown)

An official website of the United States government Here's how you know

National Park Service

PLACE

Eucalyptus Windbreak

Channel Islands National Park (https://www.nps.gov/chis/)



Eucalyptus Windbreak

At an unknown date (but approximately 100 years ago), island owners planted a windbreak of eucalyptus trees west of the ranch complex with the intention of protecting the agricultural fields to its east from the heavy winds blowing down from the hills.

Planted in a dense row, the windbreak consists of about 225 to 250 mature blue gum (Eucalyptus globulus), red river gum (Eucalyptus camaldulensis), and forest red gum (Eucalyptus tereticornis) trees in a line almost half a mile long. All are bent to an extreme angle by the prevailing westerly wind, which makes them appear to be growing horizontally.

Eucalyptus windbreaks were a common element on 19th century coastal California ranches and farms; settlers imported the trees beginning in the 1850s.

For more detailed historical information and citations, please refer to the **Historic Resource Study: Island Legacies - A History of the Islands within Channel Islands National Park (https://www.nps.gov/chis/learn/historyculture/upload/CHIS-Historic-Resource-Study-FINAL.pdf)**

Quick Facts

AMENITIES 1 listed

Historical/Interpretive Information/Exhibits

TAGS

channel islands national park

Last updated: March 20, 2021

Was this page helpful?

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EXHIBIT 14



CHECKING FOR FUEL OR OIL ISSUES IN YOUR GENERATOR

Commercial and residential generators are a valuable investment that can keep your family or business safe during a power outage. Occasionally, however, you may notice something unusual with your standby power source, such as leaking generator oil. Here, Corbin Electrical Services, Inc. offers insights into possible issues related to fuel or oil that may occur in your home's backup generator.



IAT IS A STANDBY GENERATOR?

A standby generator, also known as a backup generator, is a type of emergency

equipment that can be placed at a residential home or a commercial property. These units are installed outside your home or business, and they automatically turn on when there is a power outage. Standby generators can use several different fuel sources to generate electrical power, such as propane, diesel, or natural gas.

When the power goes out in your home, an automatic transfer switch signals the standby generator to start up immediately. Generators can be a worthwhile investment for anyone, but they are especially valuable for people who need to refrigerate their medications or businesses that rely on electrical equipment. The benefits of having a standby generator include:

- Protection from voltage fluctuations after power is restored
- Continued power for crucial appliances and electronics
- Possibility for reduced home insurance premiums

Because backup generators connect directly to a home or commercial building's fuel source, they don't require portable fuel or need to be refilled. However, standby generators do require regular maintenance, and from time to time they may require replacement parts or repairs.

SIGNS THERE MAY BE AN ISSUE WITH YOUR GENERATOR

Just like any type of equipment, standby generators require occasional inspection and maintenance to run at peak performance. If your generator is slow to start up or stops working entirely, look for these telltale signs that it needs repairs:

- Grinding or humming noises
- Unusual odors
- Frayed or broken wires
- Corrosion or other external damage

- Leaking oil or other liquids

FUEL OIL GENERATOR ISSUES

If you smell fuel oil or notice your generator leaking oil, there could be a few different culprits. You may need maintenance or repairs on the following parts:

FUEL LINES

A fuel leak is often caused by damaged fuel lines. Over time, normal wear and tear and temperature fluctuations can cause your fuel lines to crack or tear. If a fuel line is intact, the source of the leak may simply be a loose coupler.

FUEL TANK

Corrosion, punctures, or minor cracks in your fuel tank can cause it to leak. If your tank is overfilled, it can also be a fire hazard. Thus, fuel tanks should be inspected regularly to catch small issues before they turn into costly repairs.

AIR FILTER

In general, you should replace your generator's air filter at least once a year. Some filters can be cleaned and reused, so be sure to check with your technician first. If you see your generator leaking fuel from the air filter, it's possible that the generator's oil tank is overfilled or you have a clogged or faulty valve. This may cause oil to leak out and coat the filter.

COOLANT

In some cases, the liquid leaking from your generator is coolant, not fuel oil. Coolant circulates throughout your standby generator to keep its engine from overheating. If the coolant is low because of a leak, it may trigger a sensor that prevents your generator from starting up.

MAINTENANCE RECOMMENDATIONS FOR

RESIDENTIAL GENERATORS

Some homeowners have the expertise to perform routine generator maintenance tasks themselves. But if you notice your generator leaking fuel, it's best to call on a professional. An experienced and licensed technician can inspect your standby generator, determine the root cause of the problem, and take the necessary precautions to prevent further damage to the unit. Once they have identified the source of the leak, they can repair any damaged parts and offer recommendations for preventive maintenance to minimize the risk of future damage to your unit.

CONTACT CORBIN ELECTRICAL SERVICES, INC.

If you need help troubleshooting issues with your standby generator or notice leaking generator oil, turn to the specialists at Corbin Electrical Services, Inc. Located in Marlboro, New Jersey, Corbin Electrical Services, Inc. serves residential and commercial customers throughout NJ. Our clients count on our experienced technicians for generator maintenance and repairs, including:

- Replacing filters
- Changing engine oil
- Checking coolant levels
- Testing ventilation systems
- Inspecting air filters and other essential components
- Cleaning and tightening connections and couplers

For more information about generator installation and maintenance services, schedule an appointment or contact us today.

Corbin Electrical Services – "We Generate Peace of Mind"

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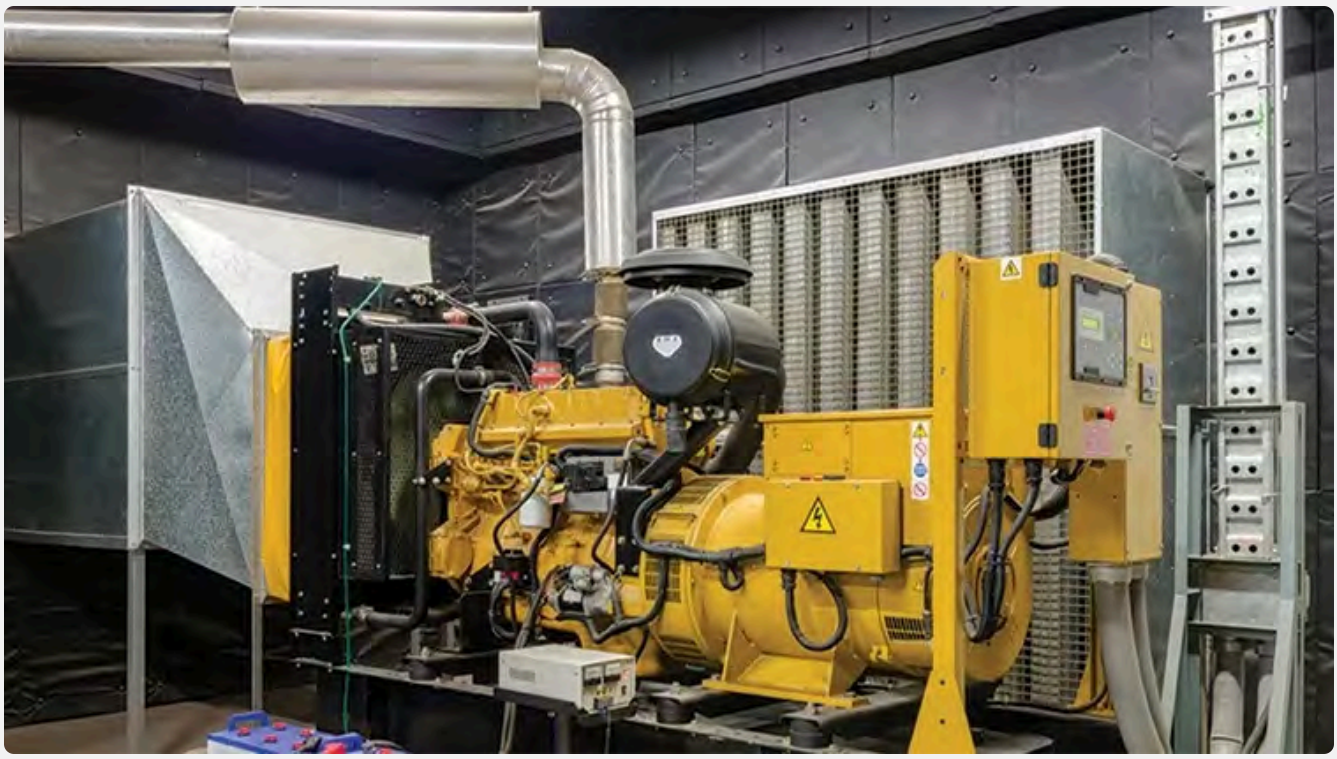
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EXHIBIT 15

How to Avoid the Exhaust Associated with Diesel Generators



Electricity. Practically everyone uses it. We power everything from a children's toy to hearing aids using some form of electrical power. Electric power makes life productive and comfortable. Sometimes, it even saves lives.

However, what happens when the power is interrupted? For most, it's an irritation. Still, in some situations, it is the difference between life and death. The possibility of power interruption is why

some applications rely on backup power. Hospitals, laboratories, data centers, and other mission-critical facilities almost always use backup power sources. These sources often are diesel-powered generators.

Diesel generators are fuel-efficient and run longer—helpful in the event of a long-term power outage. These generators, while providing life-saving electricity, also have a darker side.

The complaint against diesel generators comes from the high temperatures it produces, along with the distinctive smokey odor. This combination of a noxious odor and high temperature causes problems when the generator is operating. Placement of the exhaust stack and changing wind direction can cause the smoke, heat, and odor to re-entrain into the facility or a neighboring building.

One Solution

Most diesel generators are very heavy, often requiring placement on the lowest floor of a building. Generators can range widely in power generation capabilities depending on the use. For example, a 1500kW generator can produce 12,000 cfm of exhaust fumes. The temperature of those fumes can exceed 775°F.

Exhausting those fumes requires ductwork running from the generator to the building roof deck. The ductwork connects to an exhaust stack. The variables of exhausting these fumes often cause air

- Added cost
- Additional back pressure on the diesel generator
- Aesthetics

The Best Solution

The previous solution addressed the high-temp, odorous exhaust coming from a diesel generator. However, the additional cost, stress on the generator, and aesthetics make this solution a poor choice. The best solution allows the high-temp exhaust to enter a bypass plenum where it mixes with ambient air.

This mixing cools and dilutes the hot and harmful exhaust. Then, an exhaust fan designed for high temperatures pulls the air through a high-plume dilution nozzle, where the exhaust cools and dilutes more. However, the most important aspect of the dilution nozzle is its ability to create stack height, propelling the exhaust effluent away from the facility roof deck and air intakes. The best part is that this dilution nozzle does so without the expense and impact on aesthetics.

Mission-critical operations such as those in hospitals and laboratories cannot be without power for extended periods. Diesel generators currently provide most backup options for these situations.

However, these generators create high-temperature exhaust and diesel odors that can add cost and increase the potential for effluent re-entrainment.

The best solution addresses all these concerns, reducing the effect of high-temperature exhaust, ensuring no exhaust reenters the building or nearby facilities, and does so without affecting building aesthetics.

Climate Systems provides fresh commercial HVAC innovations to the Sioux Falls area. Call 605.334.2164, email info@climatesystemsinc.com or visit climatesystemsinc.com to learn more.

Source: "How to Avoid the High-Temperature (and Odorous) Exhaust Associated with Diesel Generators," Matt Gaedtke, Greenheck



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EXHIBIT 16

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Glob Pediatr Health. 2018 Aug 17;5:2333794X18789275. doi: 10.1177/2333794X18789275

Health Risks Associated With Benzene Exposure in Children: A Systematic Review

Mark A D'Andrea [1], G Kesava Reddy [1,✉]

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PMCID: PMC6100118 PMID: 30148190

Abstract

Currently, there is a paucity of studies evaluating the adverse health effects of benzene exposure in children or clinical findings of those children who have been exposed. However, emerging studies show that benzene exposure can cause deleterious health effects in children. The objective of this study was to evaluate and summarize published studies on the adverse health effects of benzene exposure in children. More than 77 articles were examined and only the articles that dealt with adverse health effects on pediatric populations were included in the study. The evaluation of those studies provided current understanding of the health effects of benzene exposure in children. Findings from the currently available studies reveal that benzene exposure is associated with abnormalities in hematologic, hepatic, respiratory, and pulmonary functions in children. Published studies clearly support the need for further assessment of the potential adverse effects of benzene exposure in children, and clinical and laboratory findings of these children.

Keywords: benzene poisoning, blood disorders, chemical exposure, health impact, hematological toxicity, hepatotoxicity, Illness symptoms, pediatric populations, psychological effects, respiratory

function

Introduction

Benzene is a clear colorless flammable solvent with an almost sweet yet gasoline-like odor that easily volatilizes into vapors in air. It is a natural component of both crude and refined petroleum and is formed as a result of the incomplete combustion of fossil fuels such as petroleum products and coal.[1] Benzene ranks in the top 20 most abundantly produced chemicals in the United States.[2] It is a commercially important intermediate of many chemicals manufactured in the industry. In addition, benzene is the most widely used chemical in the synthesis of various polymers, resins, and synthetic fibers. More than 98% of the benzene produced is derived from the petrochemical and petroleum refining industries.[3] The major sources of most of the ambient benzene is from petroleum refineries, emissions from coal and oil combustion, motor vehicle exhaust, evaporation from gasoline service stations, industrial solvents, and hazardous waste sites. Benzene is also a major component of tobacco smoke.[4] As a volatile organic compound, it is one of the main contributors to air pollutants in the environment.[5,6] It is found in the environment as a contaminant from both human activities and natural processes.[7,8]

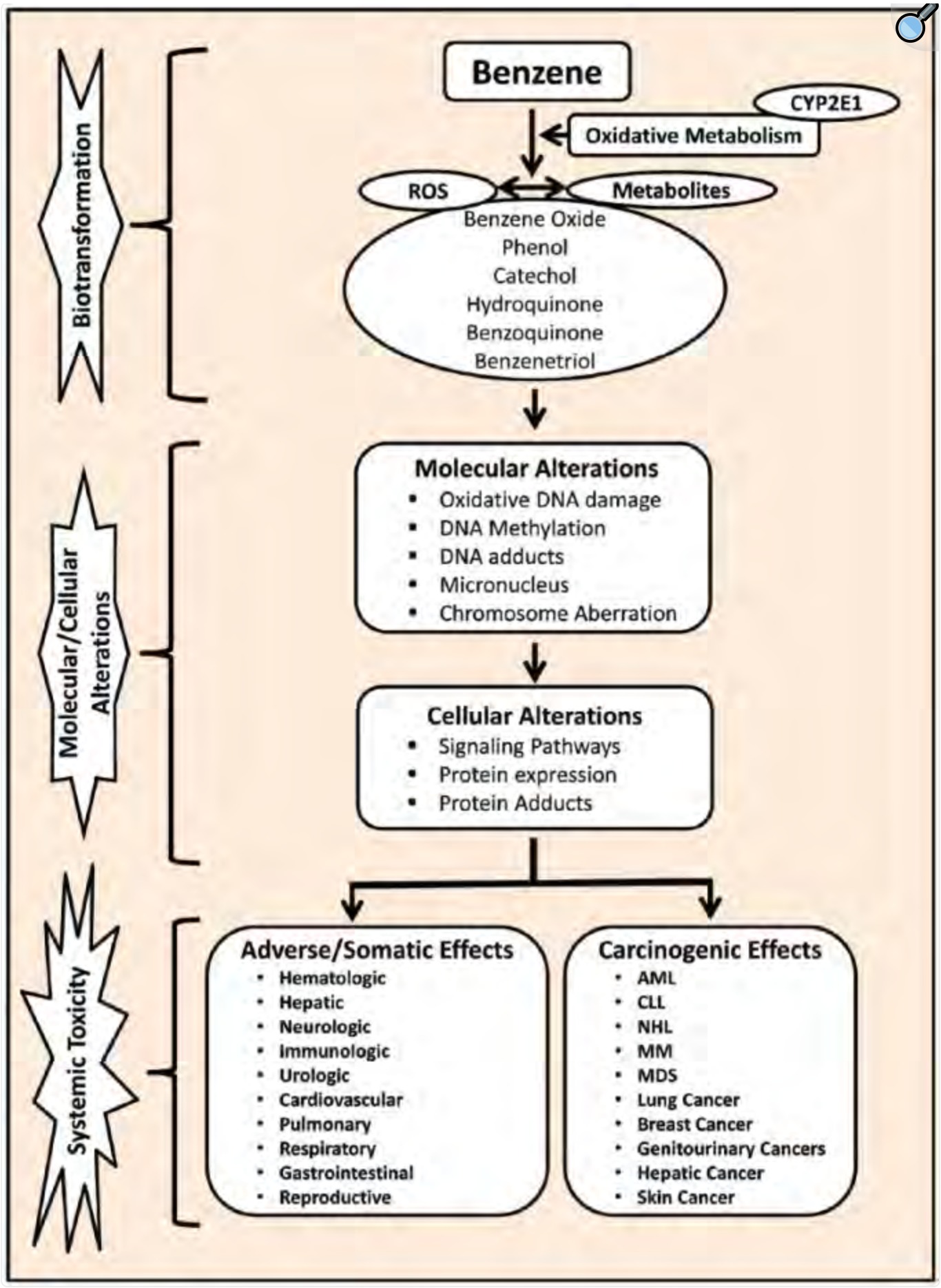
Environmental benzene exposure is an important health concern. It has been clearly established that human exposure to benzene leads not only to hematologic cancers[9,10] but also to a wide range of adverse noncancerous effects including functional aberration of respiratory, nervous, immune, hematological, hepatic, renal, cardiovascular, and reproductive systems.[5,11-15] Additionally, benzene exposure can affect both B-cell and T-cell proliferation, reduce the host resistance to infection, and produce chromosomal aberrations.[16] These deleterious health effects of benzene exposure have been very well established, especially in adults. However, there is a paucity of investigations evaluating the clinical findings and adverse health effects of benzene exposure in children. Although the literature on the health consequences of benzene in children is scant, emerging studies show that benzene exposure can cause deleterious health effects in children. Moreover, epidemiological evidence suggests that environmental benzene exposure is potentially a major cause of childhood leukemia and other hematologic cancers.[17-20]

Children at various developmental stages have unique physical risk factors when exposed to environmental toxins including benzene due to their levels of mobility, oxygen consumption, hormonal production, and overall growth. In addition, the toxicodynamic processes that determine exposure, absorption, metabolism, excretion, and tissue vulnerability are all age related.[21] Moreover, children have a higher unit body weight exposure to benzene or other toxins than adults because of their heightened activity patterns and different ventilation tidal volumes and

frequencies. Furthermore, children are more susceptible to leukemogenesis because their hematopoietic cell populations are differentiating and undergoing maturation. The incomplete metabolic systems, immature host defenses, high rates of infection by respiratory pathogens, and activity patterns make children more vulnerable to the toxic effects of benzene exposure.[22,23] The physiology, immature enzyme systems, and clearance mechanisms play a critical role in determining the susceptibility of children to toxins.[21-24] In particular, the pharmacokinetics of benzene differ widely between children and adults due to children's incomplete metabolic systems, rapid tissue regeneration, immature host defenses, activity patterns, and high rates of infection by respiratory pathogens.[22,23] Thus, children are more susceptible to the effects of environmental toxic pollutants. However, the susceptibility to benzene may vary due to its effect that arises, in part, from genetic variations in its metabolism, DNA repair, genomic stability, and immune function.

The precise mechanism of benzene-induced toxicity is not completely understood but it is believed that there are multiple mechanisms of action involved in benzene toxicity (Figure 1).[25-27] More specifically, the toxic effects of benzene are believed to arise from its metabolites such as benzene oxide, phenol, benzoquinone, muconaldehydes, hydroquinone, and catechol. Following absorption, benzene is metabolized by cytochrome P450 in the liver resulting in the production of its metabolites phenol, catechol, hydroquinone, and benzene oxide.[26] These metabolites undergo further metabolism in the bone marrow to form a benzoquinone. Numerous studies have shown that many of these benzene metabolites are directly responsible for both its cytotoxic and genotoxic effects.[28-30] In the bone marrow, formation of benzoquinone from the metabolism of benzene produces myelotoxicity due to its high reactivity to form adducts with proteins and DNA.[26,31] These protein and DNA adducts interfere with the cellular functions and cause damage in the hematopoietic cells in addition to chromosomal aberration, oxidative stress, gene expression alteration, error-prone DNA repair, epigenetic regulation, apoptosis, and disruption of tumor surveillance.[32] The generation of free radicals leading to oxidative stress, immune system dysfunction, and decreased immune surveillance has been described as the possible mechanisms underlying benzene-induced toxicity.[33]

Figure 1.


Biotransformation
Benzene
CYP2E1
Oxidative Metabolism
ROS
Metabolites
Benzene Oxide
Phenol
Catechol
Hydroquinone
Benzoquinone
Benzenetriol
Molecular/Cellular Alterations
Molecular Alterations
Oxidative DNA damage
DNA Methylation
DNA adducts
Micronucleus
Chromosome Aberration
Cellular Alterations
Signaling Pathways
Protein expression
Protein Adducts
Systemic Toxicity
Adverse/Somatic Effects
Hematologic
Hepatic
Neurologic
Immunologic
Urologic
Cardiovascular
Pulmonary
Respiratory
Gastrointestinal
Reproductive
Carcinogenic Effects
AML
CLL
NHL
MM
MDS
Lung Cancer
Breast Cancer
Genitourinary Cancers
Hepatic Cancer
Skin Cancer

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A schematic illustration of benzene metabolism, its mechanisms of toxicity, and its toxic effects in humans. Abbreviations: AML, acute myeloid leukemia; CLL, chronic lymphocytic leukemia; CYP2E1, cytochrome P450 2E1; MDS, myelodysplastic syndrome; MM, multiple myeloma; NHL, non-hodgkin lymphoma; ROS, reactive oxygen species.

Given the importance of the toxicity of benzene, this review article provides summaries of the current scientific knowledge and understanding of the clinical findings and health consequences of benzene exposure among children. Specifically, this article summarizes the quantitative changes in hematological and hepatic functions in addition to qualitative changes among somatic symptom in children exposed to benzene.

Methods

We sought all published studies, primarily in the peer-reviewed literature using electronic databases such as MEDLINE via PubMed and Google Scholar. The combinations of the keyword "benzene exposure" with any of the association to the following terms was used for the search in the database search: children, pediatrics, adverse health effects, blood disorders, chemical exposure, hematological toxicity, hepatotoxicity, illness symptoms, psychological effects, and respiratory function. We also searched reference lists in those publications that we obtained in an attempt to find additional relevant publications. Nonindexed journals were manually searched. The search was restricted to English-language articles. Abstracts that had been published in English were also included in this study.

Results

Figure 2 shows the steps involved in the selection process of the published articles for the study. On reviewing the articles' titles, abstracts, and full text content of the study, most of the articles were excluded. The main reasons for exclusion were that they were either nonquantitative, nonanalytical, or lacked clinical data. Articles with clinical data were reviewed, and the information that related to the health effects of benzene exposure in children was assessed and summarized in this review article (Table 1).

Figure 2.



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A flow chart illustrating the selection of articles for the study.

Table 1.

Summary of Studies on the Effect of Benzene Exposure Among Children.

Location of Study	Study Design	Children's Age	Sample Size	Observed Clinical Health Effects	Reference
Ulsan, Korea	Cohort	8-11 years	192 (97 benzene exposed and 95 control) children	Reduced WBC, RBC, platelets, and lymphocytes counts, decreased hemoglobin in benzene-exposed children compared with unexposed children	Lee et al (2002)[34]
Texas City, TX	Cohort	8-11 years	312 (157 benzene exposed and 155 control) children	Reduced WBC counts, increased platelet counts, elevated creatinine levels, and increased liver enzymes such as ALP, AST, and ALT in benzene-exposed children compared with unexposed children	D'Andrea and Reddy (2013)[35]
Texas City, TX	Cohort	8-11 years	899 (641 benzene exposed and 258 control) children	Reduced WBC counts, increased platelet counts, decreased hemoglobin, hematocrit, and BUN levels, and increased liver enzymes such as ALP, AST, and ALT	D'Andrea and Reddy (2016)[36]

Location of Study	Study Design	Children's Age	Sample Size	Observed Clinical Health Effects	Reference
				in benzene-exposed children compared with unexposed children	
Kanawha County, WV	Cohort	7-8 years	7796 children	Increased incidence of chronic respiratory symptoms in children attending schools located in a close proximity to chemical industries. Significant trends were observed for asthma-related responses such as a physician's diagnosis of asthma, persistent wheezing, and attacks of shortness of breath with wheezing in school children enrolled within a close proximity to chemical plants regions than those in the nonindustrial region.	Ware et al (1993)[37]
La Plata, Argentina	Cohort	6-12 years	1 191 (282 living close to the petrochemical plants, 270 exposed to heavy traffic, and 639	Significantly elevated asthma and respiratory symptoms including wheezing, cough, dyspnea, and rhinitis,	Wichmann et al (2009)[38]

Location of Study	Study Design	Children's Age	Sample Size	Observed Clinical Health Effects	Reference
			living in nonpolluted areas)	and reduced lung function in children living near the petrochemical plant compared with those living in nonpolluted areas	
Rio Grande do Norte, Brazil	Cross-sectional	0-14 years	209 children	Higher incidence of respiratory symptoms in children exposed to petrochemicals	Moraes et al (2010)[39]
El Paso, TX	Panel study	6-12 years	36 children	Increased Asthma Control Questionnaire score in children exposed to traffic pollution with benzene, toluene, and other toxins	Zora et al (2013)[40]
Asturias, Gipuzkoa, Sabadell, and Valencia, Spain	Cohort	12-18 months	2199 infants	Increased respiratory tract infections	Aguilera et al (2013)[41]
Los Angeles, CA	Panel study	10-16 years	21 children	Increased asthma and lung function among the children exposed to benzene	Delfino et al (2003)[42]
Viseu, Portugal	Panel study	6-8 years	51 children	Deteriorated lung function in children exposed to benzene	Martins et al (2012)[43]

Location of Study	Study Design	Children's Age	Sample Size	Observed Clinical Health Effects	Reference
Texas City, TX	Cohort	8-11 years	312 (157 benzene exposed and 155 control) children	Upper respiratory (67%), neurological symptoms (57%), diarrhea (25%), cough (24%), dermatological (24%), nausea/vomiting (21%), gastrointestinal (12%), wheezing (9%), chest pain (6%), vision (6%), painful joints (6%), and urinary irritation (3%)	D'Andrea and Reddy (2016)[44]

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Abbreviations: WBC, white blood cells; RBC, red blood cells; ALP, alkaline phosphatase; AST, aspartate aminotransferase; ALT, alanine aminotransferase; BUN, blood urea nitrogen.

Hematological Effects of the Benzene Exposure in Children

A cohort study by Lee and coauthors[34] assessed the hematological changes in children living near the petrochemical estate region in Ulsan, Korea, who were environmentally exposed to volatile organic compounds containing low levels of benzene. This study included a total of 192 children between the ages of 8 and 11 years who were living in close proximity to a petrochemical estate region or suburban region of Ulsan, Korea. The exposed group was composed of 48 boys and 49 girls who lived near the petrochemical estate region and went to an elementary school located near the petrochemical estate. The unexposed group was composed of 46 boys and 49 girls who had lived in the suburban region 10 miles from the petrochemical estate region. Both unexposed and benzene-exposed groups had similar age and sex distributions. Hematological assessment

revealed that the total white blood cell (WBC) counts and absolute lymphocytes counts of 11-year-old children living near the petrochemical estate region were significantly lower than those of children living in the suburban region ($P = .009$, $P = .032$, respectively). Although the 8-year-old children living near the petrochemical estate region had decreased WBC counts and absolute lymphocytes counts compared with those living in the suburban region, they did not reach statistical significance. The red blood cell (RBC) counts and hemoglobin levels of the 8-year-old exposed children were significantly lower than those of the unexposed children ($P < .001$, $P < .001$, respectively). A similar, but not statistically significant, trend was seen in the parameters in the 11-year-old exposed and unexposed groups. Whereas the platelet counts were significantly decreased in both 8- and 11-year-old exposed children compared with unexposed children ($P = -.001$, $P = -.001$, respectively). A follow-up assessment at 3 and 6 months after the initial evaluation yielded similar differences but there were not consistent findings in the exposed and unexposed groups of the 8- and 11-year-old children.

The generalized linear model analysis of variance for the complete blood count values showed that the region where the exposure took place was a significant independent variable for the total WBC counts, RBC counts, and platelet counts ($P = .007$, $P = .004$, and $P = .036$, respectively), and the children's sex was a significant independent variable for the RBC counts ($P = .001$). Similarly, age was a significant independent variable for the total WBC counts, absolute lymphocyte counts, and platelet counts ($P < .001$, $P = .004$, and $P = .005$, respectively). Overall, the study findings showed that environmental exposure to volatile organic compounds containing low levels of benzene was associated clinically with a higher prevalence of hematological abnormalities in children living near the petrochemical estate region.

A pilot study by D'Andrea and Reddy[35] evaluated the hematological function in children who were less than 17 years old and exposed to benzene following British Petroleum's (BP) flaring incident in Texas City, Texas. A total of 312 children were included in the study. Of the 312 children, 157 were exposed to benzene and 155 were not exposed to benzene. Both unexposed and benzene-exposed groups had similar age and sex distributions. Clinically, hematologic analysis showed that WBC counts were significantly decreased in benzene-exposed children compared with the unexposed children ($P = .022$). Conversely, the platelet counts were increased significantly in the benzene-exposed group compared with the unexposed group ($P = .005$). Similarly, the serum creatinine levels were significantly increased in the benzene-exposed children compared with the unexposed children ($P = .000$). However, no significant alterations were observed in the mean hemoglobin or hematocrit or blood urea nitrogen levels between the benzene exposed and unexposed children. The results of this pilot study indicated that environmental exposure to

benzene is associated clinically with altered hematological profiles in those children who were exposed to the benzene from the flaring incident at the BP refinery facility in Texas City, Texas.

A later larger cohort study by the same authors assessed the hematological changes in children exposed to benzene following the flaring incident.[36] A total of 899 children aged <17 years were included in the study. Of the 899 children, 258 were unexposed and 641 were exposed to benzene. The mean age of the unexposed and exposed children was 10.5 and 9.5 years, respectively. Among the unexposed children, there were 57% male and 43% female children. In the benzene-exposed group, there were 52% males and 48% females.

Hematological analysis indicated that those children exposed to benzene had significantly decreased mean WBC counts compared with the unexposed children ($P = .001$). Conversely, the mean platelet counts in the benzene-exposed group were significantly higher when compared with the unexposed children group ($P = .001$). Whereas the mean hemoglobin levels decreased significantly in the benzene-exposed group compared with the unexposed group ($P = .001$). Similarly, the percentage of hematocrit decreased significantly among the benzene-exposed children compared with the unexposed children ($P = .001$). Blood urea nitrogen was also found to be reduced significantly in benzene-exposed group compared with the unexposed group ($P = .001$). However, no significant differences were noted in the serum creatinine levels between the benzene exposed and unexposed groups. Furthermore, subanalysis indicated that, regardless of age or gender, significant alterations in the hematological profiles were seen in those children exposed to benzene. Overall, the findings of the hematological profiles confirmed the pilot study findings indicating that children who have been exposed to benzene have significantly increased health risks compared with unexposed children.

Effect of Benzene Exposure on Hepatic Function in Children

Currently, there are no published studies in literature that evaluated the clinical effect of benzene exposure on the liver function in children except 2 recent reports published by the authors.[35,36] The initial pilot study included 157 benzene-exposed and 155 unexposed children and assessed their liver function enzymes such as alkaline phosphatase (ALP), aspartate aminotransferase (AST), and alanine aminotransferase (ALT). The study findings revealed that benzene-exposed children had clinically significantly higher levels of ALP ($P = .04$), AST ($P = .015$), and ALT ($P = .005$) compared with the unexposed children.

Subsequently, the larger cohort study[36] assessed the liver function enzymes in 641 benzene-exposed children and compared with the 258 unexposed children. Serum ALP, AST, and ALT levels

were reported to be increased significantly in children exposed to benzene compared with the unexposed children (P = .001). Furthermore, subgroup analysis indicated that, regardless of age or gender, significant alterations in hepatic enzymes were seen in children exposed to benzene. Overall, the findings of the hepatic profiles confirmed the pilot study findings indicating that children who have been exposed to benzene have significantly increased health risks compared with unexposed children.

Benzene Exposure and Illness Symptom Profiles in Children

Among all, respiratory illness symptoms are the most often studied health complaints in children exposed to benzene or petrochemicals/urban traffic pollutants. Upper respiratory symptoms were the most (67%) frequently reported, followed by neurological symptoms (57%), diarrhea (25%), and cough (24%). Logistic regression analysis indicated that neurological symptoms (R^2 = 0.75), chest pain (R^2 = 0.64), joint pain (R^2 = 0.57), and vision difficulty (R^2 = 0.54) were positively associated with increasing age. Other studies have shown that asthma symptoms such as those related to wheezing, cough, and shortness of breath or chest tightness were the most frequently reported respiratory illness symptoms in benzene-exposed children. A study by Ware and co-investigators[37] evaluated respiratory and irritant health effects of ambient volatile organic compounds in 7796 children attending 74 elementary schools located in chemical industry regions. The findings indicated that exposure to volatile organic compounds from chemical manufacturing plants were associated with an increased incidence of chronic respiratory symptoms in children attending schools located in a close proximity to chemical industries. Significant trends were observed for asthma-related responses such as a physician's diagnosis of asthma, persistent wheezing, and attacks of shortness of breath with wheezing in school children enrolled within a close proximity to regions containing chemical plants than those in the nonindustrial regions.

Similar findings were reported in a study by Wichmann et al[38] that assessed the effects of exposure to petrochemical pollution on the respiratory health of children aged 6 to 12 years living close to petrochemical plants (n = 282) and compared them with those living in a region with exposure to heavy traffic (n = 270) or in relatively nonpolluted areas (n = 639) in La Plata, Argentina. The findings showed that children living near the petrochemical plant had significantly elevated asthma and respiratory symptoms (wheezing, cough, dyspnea, and rhinitis) and significantly reduced lung functions than those living in nonpolluted regions (P < .001). Moraes and coworkers[39] investigated the health impacts of living near petrochemical plants by assessing respiratory illnesses in 209 Brazilian children. The results from this study revealed that

respiratory symptoms were found to be increased in children among communities in the vicinity of a petrochemical complex particularly those living downwind from the plant.

A panel study conducted by Zora et al[40] assessed the associations between urban air pollution of benzene and pediatric asthma control using an Asthma Control Questionnaire (ACQ) score in 2 elementary schools located in high- and low-traffic areas of El Paso, Texas. Eligibility criteria included age of the children between 6 and 12 years, a physician diagnosis of asthma, no other lung disease or major illness, a nonsmoking household, and residence proximal to their school. Data were reported for 36 of the 38 children who completed the protocol. The study found that benzene levels in the air of a school located in the high-traffic area ranged from 0.2 to 2.4 $\mu g/m^3$. Although no significant associations between benzene and other pollutants with an increase in ACQ score were found, an increase in ACQ score was related with an increase in benzene levels among children inhaling corticosteroids daily. Aguilera et al[41] investigated the association of air pollution exposure during pregnancy and respiratory illnesses, ear infections, and eczema during the first 12 to 18 months of life in a Spanish birth cohort of 2199 infants. These authors observed that during the second trimester of pregnancy, an increase in 1.0 $\mu g/m^3$ of benzene exposure was associated with an increased risk of lower respiratory tract infections in those infants.

In a panel study, Delfino et al[42] examined the longitudinal relationship of the daily asthma severity among asthmatic children exposed to volatile organic compounds such as benzene. The study included 21 asthmatic children between 10 and 16 years of age. The study revealed that increased mean concentrations of benzene (5.7 $\mu g/m^3$) levels were associated with increased asthma and poor lung function among the children. Martins and coauthors[43] evaluated the relationship between air polluted by benzene exposure and airway changes in a group of wheezing children. The investigators included a total of 51 wheezing children with a mean age of 7.3 years from Viseu, Portugal. Benzene levels were monitored for 4 weeks, and using a dispersion model, personal exposure was determined based on time-activity patterns according to the estimations. These authors reported that an increase in 10.0 $\mu g/m^3$ of benzene exposure was associated with deteriorated lung function-related outcomes in wheezing children.

In a pilot study, we investigated the clinical presentation of the illness symptoms experienced by children who were exposed to benzene following a flaring incident at the BP refinery in Texas City, Texas.[35] The study included a total of 157 children who were exposed to benzene. Among the illness symptoms, neurological symptoms such as unsteady gait, memory loss, and headaches were the most (80%) frequently reported symptoms in children exposed to benzene. Upper respiratory symptoms were reported by 48% of the benzene-exposed children followed by cough (48%), nausea/vomiting (43%), dermatological (36%), shortness of breath (32%), wheezing (27%),

dizziness (22%), chest pain (15%), painful joints (15%), and weight loss (13%). To complement these findings, recently we conducted a full-fledged study in 641 children who were exposed to benzene following a flaring incident at the BP refinery in Texas City, Texas.[44] A total of 1790 illness symptoms were observed in 641 children exposed to benzene.

Among all clinically presented illness symptoms, upper respiratory symptoms occurred as the most frequently (67%) followed by neurological symptoms (57%), diarrhea (25%), and cough (24%). Logistic regression analysis indicated that neurological symptoms (R^2 = 0.75), chest pain (R^2 = 0.64), joint pain (R^2 = 0.57), and vision difficulty (R^2 = 0.54) were positively associated with increasing age of the children. Overall, the findings revealed that children exposed to benzene experienced range of illness symptoms indicating their vulnerability to increased risks and health complications.

Discussion

The literature reviewed in this article indicates there is a growing interest in evaluating the clinical and health consequences of benzene exposure among children. The literature on both clinical and health effects of benzene exposure in children is scarce, and studies evaluating the hematological, hepatic, and respiratory effects of benzene exposure are starting to emerge based on established biological mechanisms of benzene toxicity. Overview of the findings of the studies included in this review indicates that benzene exposure among children was clinically associated with alterations in hematologic, hepatic, and respiratory functions. In addition, benzene exposure was associated with the clinical presentation of several illness symptoms in children.

Clinical evidence further suggests that hemotoxicity is the major effect and is unique to benzene. Exposure to benzene causes bone marrow injury resulting in hemotoxicity leading to changes in WBCs, platelets, hemoglobin, hematocrit, and other blood cells formation. Multiple mechanisms including alterations in the expression of numerous genes and proteins, DNA methylation patterns, and RNA profiles appear to play an important role in benzene-induced hemotoxicity in exposed children.[27]

Although several studies have investigated the effect of benzene exposure on the hematological changes in adults, only a handful of studies published so far have evaluated the clinical changes in the hematological functions among children following their exposure to benzene.[34-36] The findings of these studies demonstrate that children exposed to benzene experienced significantly reduced hematological indices compared with those unexposed children. However, conflicting findings in platelet counts were observed in benzene-exposed children. Our recently published studies

demonstrated significantly elevated platelet counts in children who were exposed to benzene compared with unexposed children.[35,36] However, in the study reported by Lee and associates,[34] significantly decreased platelet counts were observed in children exposed to benzene compared with unexposed children. Although the discrepancies in the platelet counts in benzene-exposed children currently cannot be explained, Ceresa and coworkers[45] previously found that thrombocytopenia was not a constant finding in most of the adult subjects who were exposed to benzene. Nevertheless, additional studies are warranted to clarify the effect of benzene exposure on the platelet counts in children.

The liver is the principal organ of xenobiotic metabolism, and hence, it is very important to monitor its function in people exposed to benzene or other toxins. It is well known that phosphatases, aminotransferases, and dehydrogenases are important enzymes in the biological processes. They are involved in the detoxification, metabolism, and biosynthesis of energetic macromolecules for different essential functions. Any interference in these enzymes leads to biochemical impairment and changes in the tissue and cellular function. Thus, the measurement of these liver enzyme such as ALP, AST, and ALT are routinely assessed as indicators for hepatic dysfunction and damage.[46,47] In normal conditions, these enzymes are confined to the cells but are released into circulating blood when there is necrosis or injury. Despite its importance, until recently, there were no published studies available in the literature evaluating the effect of benzene exposure on the hepatic function in children. The 2 recent studies reported by the authors[35,36] revealed that the serum levels of ALP, AST, and ALT were found to be elevated among those children who were exposed to benzene indicating hepatic abnormalities in these children. The increase in the levels of these liver enzymes in their serum suggests the impairment of the hepatic function in children exposed to benzene.

Studies assessing the somatic or clinically presenting illness symptoms such as respiratory, neurological, gastrointestinal, and other symptoms in children exposed to benzene were also limited in the published literature. However, evidence from available studies suggests that benzene exposure is associated clinically with sickness symptoms in children. The most common clinical presentations of the illness symptoms include neurological, respiratory, shortness of breath, wheezing, dizziness, chest pain, and painful joints.

Conclusions

Together, studies evaluating the clinical changes in the hematologic, cardiac, hepatic, renal, and other vital organ functions in children who were exposed to benzene are sparse. We have yet to learn and understand the full extent of all the adverse effects that benzene exposure has on

pediatric populations. Findings from the currently available studies reveal that benzene exposure is associated with clinical abnormalities in the hematologic, hepatic, respiratory, and pulmonary functions in children. The hematological abnormalities were characterized by changes in RBC, WBC, absolute lymphocytes, platelets, hemoglobin, hematocrit, and creatinine in benzene-exposed children. Similarly, the hepatic abnormalities were characterized by elevated levels of ALP, AST, and ALT enzymes in the serum of the children exposed to benzene. Few studies have evaluated the somatic or illness symptoms such as respiratory, neurological, gastrointestinal, and other symptoms in children exposed to benzene. These findings indicate that exposure to benzene may lead to clinically detectable detrimental health effects in children. However, to fully understand the importance and nature of these effects, further longitudinal and mechanistic studies on the health effects of benzene exposure in children are warranted.

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Footnotes

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ORCID iD: G. Kesava Reddy https://orcid.org/0000-0002-1936-6972

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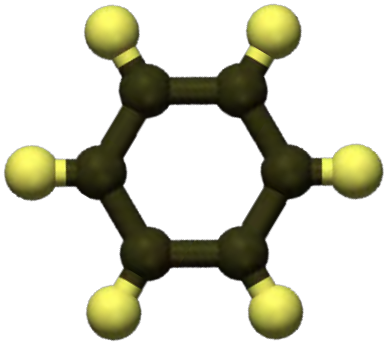
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Articles from Global Pediatric Health are provided here courtesy of **SAGE Publications**

EXHIBIT 17

Groundwater Fact Sheet
Benzene



Constituent of Concern
Benzene

Synonym
Annulene, Benzol, Phene, Phenyl hydride, Pyrobenzole, Cyclohexatriene

Chemical Formula
C_6H_6

CAS Number
71-43-2

Storet Number
34030

Summary
Benzene is a regulated chemical with an established California State Maximum Contaminant Level (MCL) in drinking water of 1 µg/L. Benzene is a colorless highly flammable liquid that evaporates quickly into air and dissolves slightly in water. It is widely used and found in crude oils and as a by-product of oil-refining processes. In industry, benzene is used as a solvent, as a chemical intermediate, and is used in the synthesis of numerous chemicals. It also occurs naturally in volcanic gases and smoke resulting from forest fires. Benzene can get into drinking water from industrial discharge, gas storage tank leaching, and landfills. It can evaporate from soil and groundwater into a gas or vapor, which then can enter buildings by traveling through soil or cracks in bedrock or concrete. The Environmental Protection Agency (EPA) classified benzene as a known human carcinogen for all routes of exposure.

Based on State Water Resources Control Board (SWRCB) data from 2007 to 2017, 8 active and standby public water supply wells (of 8,997 tested, 17 detections) had at least one detection of benzene above the MCL.

REGULATORY WATER QUALITY LEVELS[1]

BENZENE

Type	Agency	Concentration
Federal MCL	EPA[2]	5 µg/L
State MCL	SWRCB[3]	1 µg/L
Detection Limit for Purposes of Reporting (DLR)	SWRCB[3]	0.5 µg/L
Public Health Goal (PHG)	OEHHA[4]	0.15 µg/L
Cancer Potency Factor ($1/10^6$ cancer risk)	OEHHA[4]	0.35 µg/L

[1]These levels are generally related to drinking water. Other water quality levels may exist. For further information, see "A Compilation of Water Quality Goals", 17th Edition (SWRCB 2016).
[2] EPA – United States Environmental Protection Agency
[3]SWRCB - State Water Resources Control Board
[4]OEHHA – Office of Environmental Health Hazard Assessment

Revised October 2017

BENZENE DETECTIONS IN PUBLIC WATER WELL SOURCES[5]	
Number of active and standby public water wells with benzene concentrations > 1 µg/L[6]	8 of 8,997 wells tested with 17 detections
Top counties with benzene detection in public wells above the MCL	King County (2), and 1 well from each of the following counties: Fresno, Kern, Los Angeles, San Joaquin, Sonoma, and Yuba

[5] Based on 2007-2017 public standby and active well (groundwater sources) data collected by the SWRCB.
[6] Water from public active and standby public groundwater sources is typically treated to prevent exposure to chemical concentrations above MCL. Data from private domestic wells and wells with less than 15 service connections are not available.

ANALYTICAL INFORMATION			
Approved EPA methods	502.2	8260/524.2	8020
Detection Limit (**µg/L**)	0.01	0.04	0.2
Notes	Gas chromatography with photoionization and electrolytic conductivity detectors	Gas chromatography/mass spectrometry - EPA Method 8260 is used at Leaking Underground Fuel Tank (LUFT) sites	Gas chromatography with photo-ionization detector
Known Limitations to Analytical Methods	Sample must be cooled to 4 °C upon collection, analyzed within 14 days and free of air bubbles. EPA Method 8020 can detect benzene but may yield false positives when other volatile organic compounds are present and co-elute in the same chromatographic range. The presence of benzene should be confirmed by EPA Method 524.2 or Method 8260 prior to use of Method 8020 for a long-term monitoring program.		
Public Drinking Water Testing Requirements	Benzene is a regulated chemical for drinking water sources, with monitoring and compliance requirements (Title 22, Section 64431, et seq.).		

Benzene Occurrence

Anthropogenic Sources

Benzene is a naturally occurring chemical found mostly in crude oil and gasoline. Benzene in unleaded gasoline is typically around 1 percent of the total volume. By 2007, the worldwide annual demand for benzene was approximately 40 million tons. Most of it is used to produce styrene and

cumene: chemicals used in the manufacturing of plastics, resins, adhesives, and nylon. It is estimated that approximately 6 million tons of benzene was used annually in the USA in the 1990s.

Benzene can be released into groundwater from leaking underground fuel storage tanks and piping, atmospheric deposition, fuel spills during transportation, and leaks at refineries. Underground storage tanks or piping releases make up most of the releases that have impacted groundwater. Studies have shown that atmospheric deposition of benzene results only in trace concentrations in surface waters. In contrast, point sources of benzene contamination such as underground storage tank sites may result in benzene concentrations in the milligrams per liter (mg/L) range.

Natural Sources

Benzene occurs naturally in the environment as a product of incomplete combustion of carbon-rich materials. Benzene is also present in petroleum oil deposits and in gases associated with volcanic eruptions and forest fires.

History of Occurrence

Benzene replaced lead as a gasoline additive for its anti-knock properties. Concerns about negative health effects related to air quality led to the limitation of benzene content in gasoline to about 1 percent. EPA regulations had further lowered the benzene content to 0.62 percent in 2011. Based on a SWRCB data query in March 2017 using the Groundwater Ambient Monitoring and Assessment Program's Groundwater Information System (GAMA GIS), 20 active and standby public water wells out of approximately 100,000 sampled had benzene detections above the State MCL at least once since 1984. The maximum measured concentration was 180 µg/L.

Contaminant Transport Characteristics

Benzene can volatilize into air from soil and water. Once in the atmosphere, benzene breaks down (biodegrades) within a few days. In soil and groundwater, the biodegradation process is slower. Benzene is slightly soluble in water and can migrate through the soil column into groundwater. Because benzene is a light non-aqueous phase liquid (LNAPL) it can collect on top of the water table. Benzene biodegradation in groundwater can take days to years, depending on oxygen concentration, temperature, and the presence of favorable bacteria.

Remediation and Treatment Technologies

Soil and Groundwater Remediation

Several effective remediation technologies remove benzene and other gasoline compounds from soil and groundwater.

These include:

Soil Vapor Extraction (SVE)

Effective in reducing benzene in the unsaturated zone due to the high vapor pressure.

Air Sparging

Used in conjunction with soil vapor extraction. This can also oxygenate the groundwater and stimulate biodegradation of dissolved contaminants.

In-situ Oxidation

Relies on the capacity of certain chemicals (e.g., hydrogen peroxide combined with iron) to rapidly oxidize organic molecules in water.

Bioremediation

Most effective under aerobic conditions.

Flushing (Pump and Treat)

Extracts contaminated groundwater and treats at the surface using air stripping, activated carbon, or advanced oxidation systems.

Drinking Water and Wastewater Treatment

For drinking water, the most common treatment options are air stripping, activated carbon filters, and advanced oxidation (combinations of ultraviolet light, chemical oxidants, and catalysts). There are other emerging technologies for the remediation and treatment of benzene and gasoline compounds including permeable reactive barriers and thermal treatment.

Health Effect Information

Exposure to benzene can occur through the lungs (inhalation), gastrointestinal tract (ingestion), and through skin (dermal contact). Health effects depend on two main factors: length of exposure and concentration (amount of benzene a person is exposed to).

Brief exposure to very high levels of benzene in air can result in death, while breathing lower levels can cause drowsiness, confusion, dizziness, headaches, tremors, and unconsciousness. The major effect of benzene exposure is to the blood. Long term exposure to benzene can affect the body's ability to produce red blood cells. When the bone marrow is affected, the result is usually a form of leukemia. It can also cause blood (hematologic) diseases, anemia, and cancers of blood-forming organs. The most common long-term health effects associated with benzene exposure are:

- Acute Myelogenous Leukemia (AML) in which cancer cells are present in the blood and bone marrow.
- Acute Lymphocytic Leukemia (ALL) in which cancer affects the cells that make the lymphocytes for the bone marrow.
- Chronic Myelogenous Leukemia (CML) in which leukemia develops from the white blood cells reducing the body's ability to fight disease and infection.

Key Resources

1. California State Water Resources Control Board, *A Compilation of Water Quality Goals, 17th Edition (SWRCB, 2016).* http://www.waterboards.ca.gov/water_issues/programs/water_quality_goals/index.shtml
2. Office of Environmental Health Hazard Assessment-California Environmental Protection Agency Public Health Goal for BENZENE In Drinking Water https://oehha.ca.gov/media/downloads/water/chemicals/phg/benzenefinphg.pdf
3. State Water Resources Control Board, California Drinking Water-Related Laws http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Lawbook.shtml
4. State Water Resources Control Board, GAMA GIS Online Database http://www.waterboards.ca.gov/water_issues/programs/gama/geotracker_gama.shtml
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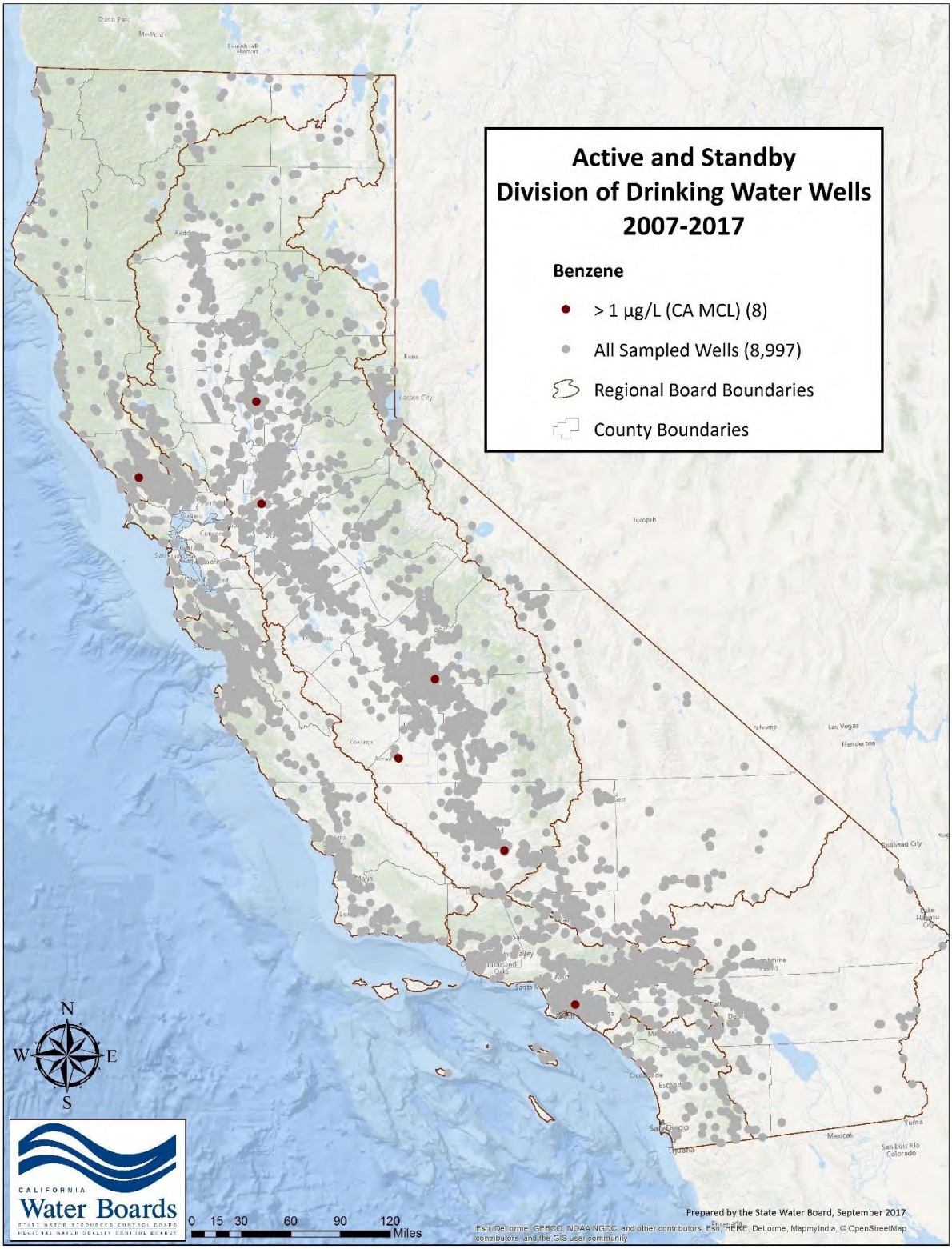


Figure 1. Active and standby public drinking water wells that had at least one detection of benzene above the MCL, 2007-2017, 8 wells. (*Source: Public supply well data in GAMA GIS*).

EXHIBIT 18

Benzene

71-43-2

Hazard Summary

Benzene is found in the air from emissions from burning coal and oil, gasoline service stations, and motor vehicle exhaust. Acute (short-term) inhalation exposure of humans to benzene may cause drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic (long-term) inhalation exposure has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests. Increased incidence of leukemia (cancer of the tissues that form white blood cells) have been observed in humans occupationally exposed to benzene. EPA has classified benzene as known human carcinogen for all routes of exposure.

Please Note: The main sources of information for this fact sheet are the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profile for Benzene (1) and EPA's Integrated Risk Information System (IRIS) (4), which contains information on the health effects of benzene including the unit cancer risk for inhalation exposure.

Uses

- Benzene is used as a constituent in motor fuels; as a solvent for fats, waxes, resins, oils, inks, paints, plastics, and rubber; in the extraction of oils from seeds and nuts; and in photogravure printing. It is also used as a chemical intermediate. Benzene is also used in the manufacture of detergents, explosives, pharmaceuticals, and dyestuffs. (1,2,6)

Sources and Potential Exposure

- Individuals employed in industries that manufacture or use benzene may be exposed to the highest levels of benzene. (1)
- Benzene is found in emissions from burning coal and oil, motor vehicle exhaust, and evaporation from gasoline service stations and in industrial solvents. These sources contribute to elevated levels of benzene in the ambient air, which may subsequently be breathed by the public. (1)
- Tobacco smoke contains benzene and accounts for nearly half the national exposure to benzene. (1)
- Individuals may also be exposed to benzene by consuming contaminated water. (1)

Assessing Personal Exposure

- Measurement of benzene in an individual's breath or blood or the measurement of breakdown products in the urine (phenol) can estimate personal exposure. However, the tests must be done shortly after exposure and are not helpful for measuring low levels of benzene. (1)

Health Hazard Information

Acute Effects:

- Coexposure to benzene with ethanol (e.g., alcoholic beverages) can increase benzene toxicity in humans. (1)

- Neurological symptoms of inhalation exposure to benzene include drowsiness, dizziness, headaches, and unconsciousness in humans. Ingestion of large amounts of benzene may result in vomiting, dizziness, and convulsions in humans. (1)
- Exposure to liquid and vapor may irritate the skin, eyes, and upper respiratory tract in humans. Redness and blisters may result from dermal exposure to benzene. (1,2)
- Animal studies show neurologic, immunologic, and hematologic effects from inhalation and oral exposure to benzene. (1)
- Tests involving acute exposure of rats, mice, rabbits, and guinea pigs have demonstrated benzene to have low acute toxicity from inhalation, moderate acute toxicity from ingestion, and low or moderate acute toxicity from dermal exposure. (3)
- The reference concentration for benzene is 0.03 mg/m3 based on hematological effects in humans. The RfC is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive groups) that is likely to be without appreciable risk deleterious noncancer effects over a lifetime. (4)

Chronic Effects (Noncancer):

- Chronic inhalation of certain levels of benzene causes disorders in the blood in humans. Benzene specifically affects bone marrow (the tissues that produce blood cells). Aplastic anemia (a risk factor for acute nonlymphocytic leukemia), excessive bleeding, and damage to the immune system (by changes in blood levels of antibodies and loss of white blood cells) may develop. (1)
- In animals, chronic inhalation and oral exposure to benzene produces the same effects as seen in humans. (1)
- Benzene causes both structural and numerical chromosomal aberrations in humans. (1)
- EPA has established an oral Reference Dose (RfD) for benzene of 0.004 milligrams per kilogram per day (mg/kg/d) based on hematological effects in humans. The RfD is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. It is not a direct estimator of risk, but rather a reference point to gauge the potential for effects. At exposures increasingly greater than the RfD, the potential for adverse health effects increases. Lifetime exposure above the RfD does not imply that an adverse health effect would necessarily occur. (4)
- EPA has established a Reference Concentration (RfC) of 0.03 milligrams per cubic meter (0.03 mg/m3) for benzene based on hematological effects in humans. The RfC is an inhalation exposure concentration at or below which adverse health effects are not likely to occur. It is not a direct estimator of risk, but rather a reference point to gauge the potential for effects. At lifetime exposures increasingly greater than the reference exposure level, the potential for adverse health effects increases. (4)

Reproductive/Developmental Effects:

- There is some evidence from human epidemiological studies of reproductive and developmental toxicity of benzene, however the data do not provide conclusive evidence of a link between exposure and effect. (4) Animal studies have provided limited evidence that exposure to benzene may affect reproductive organs, however these effects were only observed at exposure levels over the maximum tolerated dose. (4)
- Adverse effects on the fetus, including low birth weight, delayed bone formation, and bone marrow damage, have been observed where pregnant animals were exposed to benzene by inhalation.(4)

Cancer Risk:

- Increased incidence of leukemia (cancer of the tissues that form white blood cells) has been observed in humans occupationally exposed to benzene. (1,4)
- EPA has classified benzene as a Group A, known human carcinogen. (4)
- EPA uses mathematical models, based on human and animal studies,to estimate the probability of a person developing cancer from breathing air containing a specified concentration of a chemical. EPA calculated a range of 2.2×10^{-6} to 7.8×10^{-6} as the increase in the lifetime risk of an individual who is continuously exposed to 1 µg/m3 of benzene in the air over their lifetime.

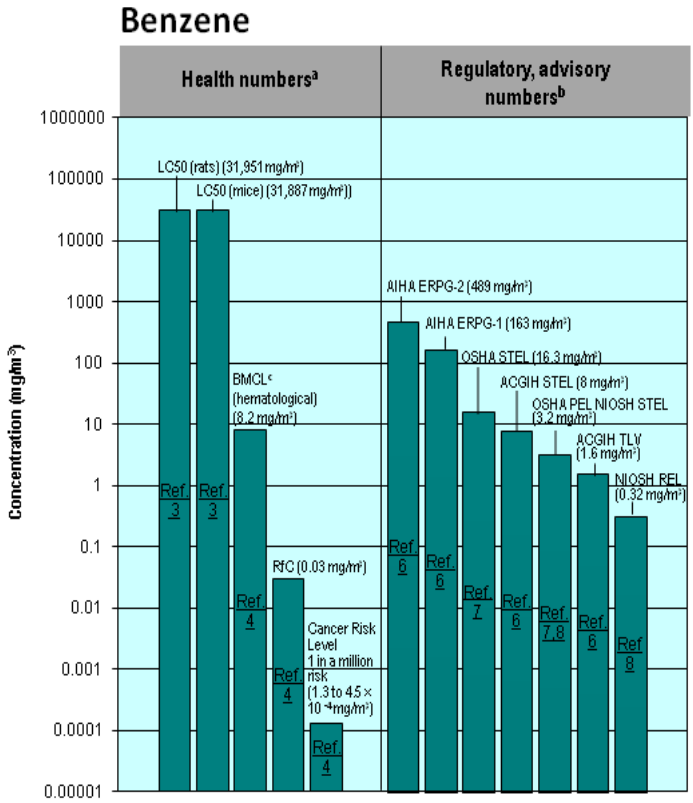
- EPA estimates that, if an individual were to continuously breathe the air containing benzene at an average of 0.13 to 0.45 µg/m^3 ($1.3x10^{-4}$ to $4.5x^{-4}$ mg/m^3) over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of continuously breathing air containing this chemical. Similarly, EPA estimates that continuously breathing air containing 1.3 to 4.5 µg/m^3 ($1.3x10^{-3}$ to $4.5x10^{-3}$ mg/m^3) would result in not greater than a one-in-a-hundred thousand increased chance of developing cancer, and air containing 13 to 45 µg/m^3 (1.3×10^{-2} to 4.5×10^{-2} mg/m^3) would result in not greater than a one-in-ten thousand increased chance of developing cancer. For a detailed discussion of confidence in the potency estimates, please see IRIS.(4)
- EPA has calculated an oral cancer slope factor ranging from 1.5×10^{-2} to 5.5×10^{-2} $(mg/kg/d)^{-1}$ that is an extrapolation from inhalation dose-response data. (4)

Physical Properties

- The chemical formula for benzene is C_6H_6, and it has a molecular weight of 78.11 g/mol. 4) Benzene occurs as a volatile, colorless, highly flammable liquid that dissolves easily in water. (1,7)
- Benzene has a sweet odor with an ASTDR reported odor threshold of 1.5 ppm (5 mg/m^3).
- The vapor pressure for benzene is 95.2 mm Hg at 25 °C, and it has a log octanol/water partition coefficient (log Kow) of 2.13. (1)

Conversion Factors (only for the gaseous form):
To convert concentrations in air (at 25°C) from ppm to mg/m^3: mg/m^3 = (ppm) × (molecular weight of the compound)/(24.45). For benzene: 1 ppm = 3.19 mg/m^3. To convert concentrations in air from µg/m^3 to mg/m^3: mg/m^3 = (µg/m^3) × (1 mg/1,000 µg).

Health Data from Inhalation Exposure



ACGIH STEL--American Conference of Governmental and Industrial Hygienists' short-term exposure limit.
ACGIH TLV--American Conference of Governmental and Industrial Hygienists' threshold limit value expressed as a time-weighted average; the concentration of a substance to which most workers can be exposed without adverse effects.
AIHA ERPG--American Industrial Hygiene Association's emergency response planning guidelines. ERPG 1 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor; ERPG 2 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing or developing irreversible or other serious health effects that could impair their abilities to take protective action. The American Industrial Hygiene Association's detection and recognition odor thresholds for benzene are 61 ppm and 97 ppm, respectively.
LC_{50} (Lethal Concentration$_{50}$)--A calculated concentration of a chemical in air to which exposure for a specific length of time is expected to cause death in 50% of a defined experimental animal population.
NIOSH REL--National Institute of Occupational Safety and Health's recommended exposure limit; NIOSH-recommended exposure limit for an 8- or 10-h time-weighted-average exposure and/or ceiling.
NIOSH STEL--NIOSH's short term exposure limit; NIOSH recommended exposure limit for a 15-minute period.
OSHA PEL--Occupational Safety and Health Administration's permissible exposure limit expressed as a time-weighted average; the concentration of a substance to which most workers can be exposed without adverse effect averaged over a normal 8-h workday or a 40-h workweek.
OSHA STEL--Occupational Safety and Health Administration's short-term exposure limit.
The health and regulatory values cited in this graph were obtained in April 2009.
[a]Health numbers are toxicological numbers from animal testing or risk assessment values developed by EPA.
[b]Regulatory numbers are values that have been incorporated in Government regulations, while advisory numbers

are nonregulatory values provided by the Government or other groups as advice. OSHA numbers are regulatory, whereas NIOSH, ACGIH, and AIHA numbers are advisory.

[c] The BMCL (statistical lower confidence limit on the concentration at the benchmark concentration, which is the concentration producing a specified change in a response rate that is considered a critical effect) was used as the point of departure for the RfC derivation. The BMCL for benzene is for hematological effects (reduction in absolute lymphocyte count) in humans (4).

Summary created in April 1992, updated in January 2000 and January 2012.

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EXHIBIT 19

SEC. 303. CONDITIONAL USES.

(See Interpretations related to this Section.)

(a) **General.** The Planning Commission shall hear and make determinations regarding applications for the authorization of Conditional Uses in the specific situations in which such authorization is provided for elsewhere in this Code. The procedures for Conditional Uses shall be as specified in this Section 303 and in Sections 306 through 306.6, except that Planned Unit Developments shall in addition be subject to Section 304, and Hospitals and Post-Secondary Educational Institutions shall in addition be subject to the Institutional Master Plan requirements of Section 304.5.

(b) **Initiation.** A Conditional Use action may be initiated by application of the owner, or authorized agent for the owner, of the property for which the Conditional Use is sought. For a Conditional Use application to relocate a General Advertising Sign under subsection (I) below, application shall be made by a General Advertising Sign company that has filed a Relocation Agreement application and all required information with the Planning Department pursuant to Section 2.21 of the San Francisco Administrative Code.

(c) **Determination.** After its hearing on the application, or upon the recommendation of the Director of Planning that no hearing is required, the Planning Commission shall approve the application and authorize a Conditional Use if the facts presented are such to establish that:

(1) The proposed use or feature, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable for, and compatible with, the neighborhood or the community. If the proposed use exceeds the Non-Residential Use Size limitations for the district in which the use is located, the following shall be considered:

(A) The intensity of activity in the district is not such that allowing the larger use will be likely to foreclose the location of other needed neighborhood-servicing uses in the area; and

(B) The proposed use will serve the neighborhood, in whole or in significant part, and the nature of the use requires a larger size in order to function; and

(C) The building in which the use is to be located is designed in discrete elements which respect the scale of development in the district; and

(2) Such use or feature as proposed will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity, or injurious to property, improvements or potential development in the vicinity, with respect to aspects including but not limited to the following:

(A) The nature of the proposed site, including its size and shape, and the proposed size, shape and arrangement of structures;

(B) The accessibility and traffic patterns for persons and vehicles, the type and volume of such traffic, and the adequacy of proposed off-street parking and loading and of proposed alternatives to off-street parking, including provisions of car-share parking spaces, as defined in Section 166 of this Code.

(C) The safeguards afforded to prevent noxious or offensive emissions such as noise, glare, dust and odor;

(D) Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs; and

(3) Such use or feature as proposed will comply with the applicable provisions of this Code and will not adversely affect the General Plan; and

(4) Such use or feature as proposed will provide development that is in conformity with the stated purpose of the applicable Use District; and

(5) The use or feature satisfies any criteria specific to the use or feature in Subsections (g),*et seq.* of this Section.

(d) **Conditions.** When considering an application for a Conditional Use as provided herein with respect to applications for development of "dwellings" as defined in Chapter 87 of the Administrative Code, the Commission shall comply with that Chapter which requires, among other things, that the Commission not base any decision regarding the development of “dwellings” in which “protected class” members are likely to reside on information which may be discriminatory to any member of a “protected class” (as all such terms are defined in Chapter 87 of the Administrative Code). In addition, when authorizing a Conditional Use as provided herein, the Planning Commission, or the Board of Supervisors on appeal, shall prescribe such additional conditions, beyond those specified in this Code, as are in its opinion necessary to secure the objectives of the Code. Once any portion of the Conditional Use authorization is utilized, all such conditions pertaining to such authorization shall become immediately operative. The violation of any condition so imposed shall constitute a violation of this Code and may constitute grounds for revocation of the Conditional Use authorization. Such conditions may include time limits for exercise of the Conditional Use authorization; otherwise, any exercise of such authorization must commence within a reasonable time.

(e) **Modification of Conditions.** Authorization of a change in any condition previously imposed in the authorization of a Conditional Use shall be subject to the same procedures as a new Conditional Use. Such procedures shall also apply to applications for modification or waiver of conditions set forth in prior stipulations and covenants relative thereto continued in effect by the provisions of Section 174 of this Code.

(f) **Conditional Use Abatement.** The Planning Commission may consider the possible revocation of a Conditional Use or the possible modification of or placement of additional conditions on a Conditional Use when the Planning Commission determines, based upon substantial evidence, that the applicant for the Conditional Use had submitted false or misleading information in the application process that could have reasonably had a substantial effect upon the decision of the Commission or the Conditional Use is not in compliance with a Condition of Approval, is in violation of law if the violation is within the subject matter jurisdiction of the Planning Commission, or operates in such a manner as to create hazardous, noxious, or offensive conditions enumerated in Section 202(c) if the violation is within the subject matter jurisdiction of the Planning Commission and these circumstances have not been abated through administrative action of the Director, the Zoning Administrator or other City authority. Such consideration shall be the subject of a public hearing before the Planning Commission but no fee shall be required of the applicant or the subject Conditional Use operator.

(1) **Public Hearing.** The Director of Planning or the Planning Commission may schedule a public hearing on Conditional Use abatement when the Director or Commission has obtained or received (A) substantial evidence submitted within one year of the effective date of the Conditional Use authorization that the applicant for the Conditional Use had submitted false or misleading information in the application process that could have reasonably had a substantial effect upon the decision of the Commission or (B) substantial evidence, submitted or received at any time while the Conditional Use authorization is effective, of a violation of conditions of approval, a violation of law, or operation which creates hazardous, noxious or offensive conditions enumerated in Section 202(c).

(2) **Notification.** The notice for the public hearing on a Conditional Use abatement shall be subject to the notification procedure described in Section 333 of this Code.

(3) **Consideration.** In considering a Conditional Use revocation, the Commission shall consider whether and how the false or misleading information submitted by the applicant could have reasonably had a substantial effect upon the decision of the Commission, or the Board of Supervisors on appeal, to authorize the Conditional Use, substantial evidence of how any required condition has been violated or not implemented or how the Conditional Use is in violation of the law if the violation is within the subject matter jurisdiction of the Planning Commission or operates in such a manner as to create hazardous, noxious or offensive conditions enumerated in Section 202(c) if the violation is within the subject matter jurisdiction of the Planning Commission. As an alternative to revocation, the Commission may consider how the use can be required to meet the law or the conditions of approval, how the hazardous, noxious or offensive conditions can be abated, or how the criteria of Section 303(c) can be met by modifying existing conditions or by adding new conditions which could remedy a violation.

(4) **Appeals.** A decision by the Planning Commission to revoke a Conditional Use, to modify conditions or to place additional conditions on a Conditional Use or a decision by the Planning Commission refusing to revoke or amend a Conditional Use, may be appealed to the Board of Supervisors within 30 days after the date of action by the Planning Commission pursuant to the provisions of Section 308.1(b). The Board of Supervisors may disapprove the action of the Planning Commission in an abatement matter by the same vote necessary to overturn the Commission's approval or denial of a Conditional Use. The Planning Commission's action on a Conditional Use abatement issue shall take effect when the appeal period is over or, upon appeal, when there is final action on the appeal.

(5) **Reconsideration.** The decision by the Planning Commission with respect to a Conditional Use abatement issue or by the Board of Supervisors on appeal shall be final and not subject to reconsideration within a period of one year from the effective date of final action upon the earlier abatement proceeding, unless the Director of Planning determines that:

(A) There is substantial new evidence of a new Conditional Use abatement issue that is significantly different than the issue previously considered by the Planning Commission; or

(B) There is substantial new evidence about the same Conditional Use abatement issue considered in the earlier abatement proceeding, this new evidence was not or could not be reasonably available at the time of the earlier abatement proceeding, and that new evidence indicates that the Commission's decision in the earlier proceeding has not been implemented within a reasonable time or raises significant new issues not previously considered by the Planning Commission. The decision of the Director of Planning regarding the sufficiency and adequacy of evidence to allow the reconsideration of a Conditional Use abatement issue within a period of one year from the effective date of final action on the earlier abatement proceeding shall be final.

(g) **Hotels and Motels.** With respect to applications for development of tourist hotels and motels, the Planning Commission shall consider, in addition to the criteria set forth in subsections (c) and (d) above:

(1) The impact of the employees of the hotel or motel on the demand in the City for housing, public transit, child-care, and other social services. To the extent relevant, the Commission shall also consider the seasonal and part-time nature of employment in the hotel or motel;

(2) The measures that will be taken by the project sponsor to employ residents of San Francisco in order to minimize increased demand for regional transportation; and

(3) The market demand for a hotel or motel of the type proposed.

(h) **Internet Services Exchange.**

(1) With respect to application for development of Internet Services Exchange as defined in Section 102, the Planning Commission shall, in addition to the criteria set forth in Subsection (c) above, find that:

(A) The intensity of the use at this location and in the surrounding neighborhood is not such that allowing the use will likely foreclose the location of other needed neighborhood-serving uses in the area;

(B) The building in which the use is located is designed in discrete elements, which respect the scale of development in adjacent blocks, particularly any existing residential uses;

(C) Rooftop equipment on the building in which the use is located is screened appropriately.

(D) The back-up power system for the proposed use will comply with all applicable Federal, State, regional and local air pollution controls.

(E) Fixed-source equipment noise does not exceed the decibel levels specified in the San Francisco Noise Control Ordinance.

(F) The building is designed to minimize energy consumption, such as through the use of energy-efficient technology, including without limitation, heating, ventilating and air conditioning systems, lighting controls, natural ventilation and recapturing waste heat, and as such commercially available technology evolves;

(G) The project sponsor has examined the feasibility of supplying and, to the extent feasible, will supply all or a portion of the building's power needs through on-site power generation, such as through the use of fuel cells or co-generation;

(H) The project sponsor shall have submitted design capacity and projected power use of the building as part of the conditional use application; and

(2) As a condition of approval, and so long as the use remains an Internet Services Exchange, the project sponsor shall submit to the Planning Department on an annual basis power use statements for the previous twelve-month period as provided by all suppliers of utilities and shall submit a written annual report to the Department of Environment and the Planning Department which shall state: (a) the annual energy consumption and fuel consumption of all tenants and occupants of the Internet Services Exchange; (b) the number of all diesel generators located at the site and the hours of usage, including usage for testing purposes; (c) evidence that diesel generators at the site are in compliance with all applicable local, regional, State, and Federal permits, regulations and laws; and (d) such other information as the Planning Commission may require.

(3) The Planning Department shall have the following responsibilities regarding Internet Services Exchanges:

(A) Upon the effective date of the requirement of a Conditional Use authorization for an Internet Services Exchange, the Planning Department shall notify property owners of all existing Internet Services Exchanges that the use has been reclassified as a conditional use;

(B) Upon the effective date of the requirement of a Conditional Use authorization for an Internet Services Exchange, the Planning Department shall submit to the Board of Supervisors and to the Director of the Department of Building Inspection a written report covering all existing Internet Services Exchanges and those Internet Services Exchanges seeking to obtain a Conditional Use authorization, which report shall state the address, assessor's block and lot, zoning classification, square footage of the Internet Services Exchange constructed or to be constructed, a list of permits previously issued by the Planning and/or Building Inspection Departments concerning the Internet Services Exchange, the date of issuance of such permits, and the status of any outstanding requests for permits from the Planning and/or Building Inspection Departments concerning Internet Services Exchange; and

(C) Within three years from the effective date of the requirement of a Conditional Use authorization for an Internet Services Exchange, the Planning Department, in consultation with the Department of Environment, shall submit to the Board of Supervisors a written report, which report shall contain the Planning Commission's evaluation of the effectiveness of the conditions imposed on Internet Services Exchanges, and whether it recommends additional or modified conditions to reduce energy and fuel consumption, limit air pollutant emissions, and enhance the compatibility of industrial uses, such as Internet Services Exchanges, located near or in residential or commercial districts.

(i)* **Large-Scale Retail Uses.** With respect to applications for the establishment of large-scale retail uses under Section 121.6, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall consider the following:

(1) The extent to which the retail use's parking is planned in a manner that creates or maintains active street frontage patterns;

(2) The extent to which the retail use is a component of a mixed-use project or is designed in a manner that encourages mixed-use building opportunities;

(3) The shift in traffic patterns that may result from drawing traffic to the location of the proposed use;

(4) The impact that the employees at the proposed use will have on the demand in the City for housing, public transit, childcare, and other social services; and

(5) An economic impact study. The Planning Department shall prepare an economic impact study using qualified City staff or shall select a consultant from a pool of pre-qualified consultants to prepare the economic impact study required by this subsection (i)(5). The analysis, in the form of a study, shall be considered by the Planning Commission in its review of the application. The applicant shall bear the cost of paying the consultant for the consultant’s work preparing the economic impact study, and any necessary documents prepared as part of that study. The study shall evaluate the potential economic impact of the applicant’s proposed project, including:

(A) **Employment Analysis.** The report shall include the following employment information: a projection of both construction-related and permanent employment generated by the proposed project, and a discussion of whether the employer of the proposed project will pay a living wage, inclusive of non-salary benefits expected to be provided, relative to San Francisco's cost of living.

(B) **Fiscal Impact.** The report shall itemize public revenue created by the proposed project and public services needed because of the proposed project, relative to net fiscal impacts to the General Fund. The impacts to the City's public facilities and infrastructure shall be estimated using the City's current assumptions in existing nexus studies (including area plan, transit, open space in-lieu fee and other impact fees), and should account for any contributions the proposed project would make through such impact fee payments.

(C) **Leakage Analysis Study.** This portion of the report shall be twofold: both quantitative and qualitative. The quantitative

portion shall provide an analysis of whether the proposed project will result in a net increase or decrease in the capture of spending by area residents on items that would otherwise be purchased outside the area. The area to be studied for potential economic impacts of the proposed project shall be determined by the City in consultation with the expert conducting the study as different sizes of study areas would be pertinent depending on a multitude of factors, including but not limited to, size and type of the proposed store. This quantitative leakage analysis should be paired with a qualitative assessment of whether the proposed use would complement existing merchandise selection in the area by adding greater variety of merchandise, bolstering the strength of an existing retail cluster, or matching evolving consumer preferences.

(j) **Change in Use or Demolition of Movie Theater Uses.** With respect to a change in use or demolition of a Movie Theater use pursuant to Section 202.4, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall make the following findings:

(1) Preservation of a Movie Theater use is no longer economically viable and cannot effect a reasonable economic return to the property owner. For purposes of defining "reasonable economic return," the Planning Commission shall be guided by the criteria for Fair Return on Investment set forth in Section 102;

(2) The change in use or demolition of the Movie Theater use will not undermine the economic diversity and vitality of the surrounding District; and

(3) The resulting project will preserve the architectural integrity of important historic features of the movie theater use affected.

(k) **Relocation of Existing General Advertising Signs pursuant to a General Advertising Sign Company Relocation Agreement.**

(1) Before the Planning Commission may consider an application for a Conditional Use to relocate an existing lawfully permitted General Advertising Sign as authorized by Section 611 of this Code, the applicant sign company must have:

(A) Obtained a current Relocation Agreement approved by the Board of Supervisors under Section 2.21 of the San Francisco Administrative Code that covers the sign or signs proposed to be relocated; and

(B) Submitted to the Department a current sign inventory, site map, and the other information required under Section 604.2 of this Code; and

(C) Obtained the written consent to the relocation of the sign from the owner of the property upon which the existing sign structure is erected.

(D) Obtained a permit to demolish the sign structure at the existing location.

(2) The Department, in its discretion, may review in a single Conditional Use application all signs proposed for relocation by a General Advertising Sign company or may require that one or more of the signs proposed for relocation be considered in a separate application or applications. Prior to the Commission's public hearing on the application, the Department shall have verified the completeness and accuracy of the General Advertising Sign company's sign inventory.

(3) Only one sign may be erected in a new location, which shall be the same square footage or less than the existing sign proposed to be relocated. In no event may the square footage of several existing signs be aggregated in order to erect a new sign with greater square footage; provided however the square footage of one or more existing signs may be disaggregated in order to erect multiple smaller signs with lesser total square footage.

(4) In addition to applicable criteria set forth in subsection (c) above, the Planning Commission shall consider the size and visibility of the signs proposed to be located as well as the following factors in determining whether to approve or disapprove a proposed relocation:

(A) The factors set forth in this subsection (A) shall weigh in favor of the Commission's approval of the proposed relocation site:

(i) The sign or signs proposed for relocation are lawfully existing but are not in conformity with the sign regulations that existed prior to the adoption of Proposition G on March 5, 2002.

(ii) The sign or signs proposed for relocation are on a City list, if any, of priorities for sign removal or signs preferred for relocation.

(iii) The sign or signs proposed for relocation are within, adjacent to, or visible from property under the jurisdiction of the San Francisco Port Commission, the San Francisco Unified School District, or the San Francisco Recreation and Park Commission.

(iv) The sign or signs proposed for relocation are within, adjacent to, or visible from an Historic District or conservation district designated in Article 10 or Article 11 of the Planning Code.

(v) The sign or signs proposed for relocation are within, adjacent to, or visible from a zoning district where general advertising signs are prohibited.

(vi) The sign or signs proposed for relocation are within, adjacent to, or visible from a designated view corridor.

(B) The factors set forth in this subsection (k)(4)(B) shall weigh against the Commission's approval of the proposed relocation:

(i) The sign or signs proposed for relocation are or will be obstructed, partially obstructed, or removed from public view by another structure or by landscaping.

(ii) The proposed relocation site is adjacent to or visible from property under the jurisdiction of the San Francisco Port Commission, the San Francisco Unified School District, or the San Francisco Recreation and Park Commission.

(iii) The proposed relocation site is adjacent to or visible from an Historic District or conservation district designated in Article 10 or Article 11 of the Planning Code.

(iv) The proposed relocation site is within, adjacent to, or visible from a zoning district where General Advertising Signs are prohibited.

(v) The proposed relocation site is within, adjacent to, or visible from a designated view corridor.

(vi) There is significant neighborhood opposition to the proposed relocation site.

(5) In no event may the Commission approve a relocation where:

(A) The sign or signs proposed for relocation have been erected, placed, replaced, reconstructed, or relocated on the property, or intensified in illumination or other aspect, or expanded in area or in any dimension in violation of Article 6 of this Code or without a permit having been duly issued; or

(B) The proposed relocation site is not a lawful location under Planning Code Section 611(c)(2); or

(C) The sign in its new location would exceed the size, height or dimensions, or increase the illumination or other intensity of the sign at its former location; or

(D) The sign in its new location would not comply with the Code requirements for that location as set forth in Article 6 of this Code; or

(E) The sign has been removed from its former location; or

(F) The owner of the property upon which the existing sign structure is erected has not consented in writing to the relocation of the sign.

(6) The Planning Commission may adopt additional criteria for relocation of General Advertising Signs that do not conflict with this Section 303(k) or Section 611 of this Code.

(l) **Change in Use or Demolition of General Grocery Uses.** With respect to a change in use or demolition of General Grocery use which use exceeds 5,000 gross square feet pursuant to Section 202.3 of this Code, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall make the following findings:

(1) Preservation of a General Grocery use is no longer economically viable and cannot effect a reasonable economic return to the property owner. The Commission may disregard the above finding if it finds that the change in use or replacement structure in the case of demolition will contain a General Grocery that is of a sufficient size to serve the shopping needs of nearby residents and offers comparable services to the former General Grocery store. For purposes of defining “reasonable economic return,” the Planning Commission shall be guided by the criteria for Fair Return on Investment set forth in Section 102; and

(2) The change in use or demolition of the General Grocery use will not undermine the economic diversity and vitality of the surrounding neighborhood.

(m) **Tobacco Paraphernalia Establishments.**

(1) With respect to a Tobacco Paraphernalia Establishment, as defined in Section 102 of this Code, in addition to the criteria set forth in Subsections (c) and (d) above, the Commission shall make the following findings:

(A) The concentration of such establishments in the particular zoning district for which they are proposed does not appear to contribute directly to peace, health, safety, and general welfare problems, including drug use, drug sales, drug trafficking, other crimes associated with drug use, loitering, and littering, as well as traffic circulation, parking, and noise problems on the district's public streets and lots;

(B) The concentration of such establishments in the particular zoning district for which they are proposed does not appear to adversely impact the health, safety, and welfare of residents of nearby areas, including fear for the safety of children, elderly and disabled residents, and visitors to San Francisco; and

(C) The proposed establishment is compatible with the existing character of the particular district for which it is proposed.

(n) **Massage Establishments.** With respect to Massage Establishments that are subject to Conditional Use authorization, in addition to the criteria set forth in subsection (c) above, the Commission shall make the following findings:

(1) Whether the use’s façade is transparent and open to the public. Permanent transparency and openness are preferable. Elements that lend openness and transparency to a façade include:

(A) active street frontage of at least 25 feet in length where 75% of that length is devoted to entrances to commercially used space or windows at the pedestrian eye-level;

(B) windows that use clear, untinted glass, except for decorative or architectural accent;

(C) any decorative railings or decorative grille work, other than wire mesh, which is placed in front of or behind such windows, should be at least 75% open to perpendicular view and no more than six feet in height above grade;

(2) Whether the use includes pedestrian-oriented lighting. Well lit establishments where lighting is installed and maintained along all public rights-of-way adjacent to the building with the massage use during the post-sunset hours of the massage use are encouraged:

(3) Whether the use is reasonably oriented to facilitate public access. Barriers that make entrance to the use more difficult than to an average service-provider in the area are to be strongly discouraged. These include (but are not limited to) foyers equipped with double doors that can be opened only from the inside and security cameras.

Exceptions. A Massage Establishment shall not require a Conditional Use authorization if the Massage Establishment satisfies one or more of the following conditions:

(1) The massage use is accessory to a Principal Use, if the massage use is accessed by the Principal Use and the Principal Use is a Hotel, not including a Residential Hotel; a Personal Service; a Health Service; or an Institutional Use as defined in this Code.

(2) The only massage service provided is Chair/Foot Massage, such service is visible to the public, and customers are fully clothed at all times.

(o) **Eating and Drinking Uses.** With regard to a Conditional Use authorization application for a Restaurant, Limited-Restaurant and Bar uses the Planning Commission shall consider, in addition to the criteria set forth in subsection (c) above, the existing concentration of eating and drinking uses in the area. Such concentration should not exceed 25% of the total commercial frontage as measured in linear feet within the immediate area of the subject site except as otherwise provided in this subsection (o). The concentration of eating and drinking uses in the Polk Street Neighborhood Commercial District shall not exceed 35% of the total commercial frontage as measured in linear feet within the immediate area of the subject site. For the purposes of this Section 303 of the Code, the immediate area shall be defined as all properties located within 300' of the subject property and also located within the same zoning district.

(p) **Adult Business, Adult Sex Venue, Nighttime Entertainment, and General Entertainment Uses.** With respect to Conditional Use authorization applications for Adult Business, Adult Sex Venue, Nighttime Entertainment, and General Entertainment uses, such use or feature shall meet the following conditions:

(1) All Nighttime Entertainment uses shall comply with the Entertainment Commission's Good Neighbor Policy.

(2) The Planning Commission may authorize Hours of Operation that exceed those principally permitted for the zoning district in which the use is located, provided that:

(A) facts presented are such to establish that the use will be operated in such a way as to minimize disruption to residences in and around the district with respect to noise and crowd control; and

(B) the proposed use shall not operate outside the Conditionally Permitted Hours of Operation for the zoning district.

(3) If the proposed use is located in a Cultural District established under Administrative Code Section 107, the Planning Commission shall consider the purpose and goals established in Section 107.2 as well as any recommendations set forth in the Cultural, History, Housing, and Economic Stability Strategy report for the district if one has been adopted pursuant to Section 107.4.

(4) The action of the Planning Commission approving a Conditional Use does not take effect until the appeal period is over or while the approval is under appeal.

(5) If the use is an Adult Business, it shall not be located within 1,000 feet of another such use.

(q) **Power Plants.** The controls of this Subsection shall apply to all Power Plants in M-1, M-2, and PDR-1-G, and PDR-2 Districts, including any intensification of a Power Plants as described in Section 178(c)(2).

(1) **Criteria.** In acting on any application for Conditional Use authorization for a Power Plant, the Commission shall consider the conditional use authorization requirements set forth in Subsection (c) above and, in addition, shall only approve an application for a Conditional Use authorization if facts are presented to establish that, on the basis of the record before the Commission:

(A) The benefits to the City's energy system resulting from the energy generated by the proposed power plant cannot be obtained in a reasonable time from a technically and economically feasible power plant and/or energy conservation project that would have materially fewer potential environmental impacts considering, but not limited to, the following: (i) Emissions of criteria air pollutants and greenhouse gas emissions; (ii) Stormwater and wastewater discharges; and (iii) noise and vibration impacts.

(B) A newly proposed Power Plant use would not directly and adversely impact existing or reasonably foreseeable adjoining land uses, or, as applied to a prior nonconforming use, the extension of the power plant use or the increase in intensity of the use would not result in increased direct and adverse impacts on existing or reasonably foreseeable adjoining land uses; and

(C) Granting Conditional Use authorization would not reasonably be expected to leave known contamination in place in such a way that would prolong or increase public health risks associated with such contamination at levels inconsistent with a risk-based remediation consistent with the proposed power plant use; and

(D) Granting Conditional Use authorization would not reasonably be expected to preclude future redevelopment and reuse of the property for non-power plant uses.

(2) **Written Findings.** The Planning Commission shall make detailed written findings explaining the basis for its decision under this Section.

(3) **Severability**. In the event that a court or agency of competent jurisdiction holds that Federal or State law, rule, or regulation invalidates any clause, sentence, paragraph of this Section or the application thereof to any person or circumstances, it is intended that the court or agency sever such clause, sentence, paragraph or section so that the remainder of this Section shall remain in effect.

(r) **Development of Large Lots in RTO and RTO-M Districts.** In order to promote, protect, and maintain a scale of development that is appropriate to each district and compatible with adjacent buildings, new construction or significant enlargement of existing

buildings on lots of the same size or larger than the square footage stated in Table 209.4 under Large Project Review shall be permitted only as Conditional Uses subject to the provisions set forth in this Section of this Code.

In addition to the criteria of Section 303(c)(1) of this Code, the Planning Commission shall consider the extent to which the following criteria are met:

(1) The mass and articulation of the proposed structures are compatible with the intended scale of the district.

(2) For development sites greater than ½-acre, the extension of adjacent alleys or streets onto or through the site, and/or the creation of new publicly-accessible streets or alleys through the site as appropriate, in order to break down the scale of the site, continue the surrounding existing pattern of streets and alleys, and foster beneficial pedestrian and vehicular circulation.

(3) The site plan, including the introduction of new streets and alleys, the provision of open space and landscaping, and the articulation and massing of buildings, is compatible with the goals and policies of the applicable Area Plan in the General Plan.

(s) **Wireless Telecommunications Services (WTS) Facilities.**

(1) Due to the potential modification of WTS Facilities over time and the resulting impacts on a neighborhood's aesthetics and character, as well as other changes in neighborhood character over time, a Conditional Use Authorization for a WTS Facility shall have a duration of ten years from the date of approval. If any administrative appeal is taken from the Conditional Use Authorization, the ten-year period shall run from the date the Authorization is upheld on administrative appeal.

(2) The Authorization may be renewed, without limitation, for subsequent time periods of ten years, subject to the following:

(A) The renewal application is filed with the Planning Department prior to expiration, but no earlier than 24 months prior to expiration.

(B) For any Conditional Use Authorization for a WTS Facility, the Planning Commission may, in granting the Conditional Use Authorization, determine that the Director shall review and determine whether to grant any application for renewal of the Conditional Use Authorization for an additional ten-year period.

(C) This provision shall not apply to Conditional Use Authorizations granted prior to the effective date of this Subsection (s). However, applications for Conditional Use Authorizations to modify existing WTS Facilities that are granted on or after the effective date of this Subsection (s) are subject to this Subsection (s).

(t) **Non-accessory Parking.** When considering a Conditional Use application for non-accessory parking for a specific use or uses, the Planning Commission shall find affirmatively that the project satisfies the following criteria, in addition to those of subsection 303(c), as applicable.

(1) In all zoning districts, the Planning Commission shall apply the following criteria:

(A) Demonstration that trips to the use or uses to be served, and the apparent demand for additional parking, cannot be satisfied by the amount of parking classified by this Code as accessory, by transit service which exists or is likely to be provided in the foreseeable future, by car pool arrangements, by more efficient use of existing on-street and off-street parking available in the area, and by other means;

(B) Demonstration that the apparent demand for additional parking cannot be satisfied by the provision by the applicant of one or more car-share parking spaces in addition to those that may already be required by Section 166 of this Code;

(C) The absence of potential detrimental effects of the proposed parking upon the surrounding area, especially through unnecessary demolition of sound structures, contribution to traffic congestion, or disruption of or conflict with transit services, walking, and cycling;

(D) In the case of uses other than housing, limitation of the proposed parking to short-term occupancy by visitors rather than long-term occupancy by employees; and

(E) Availability of the proposed parking to the general public at times when such parking is not needed to serve the use or uses for which it is primarily intended.

(2) **For Non-Accessory Parking in Mixed Use Districts:**

(A) A non-accessory garage permitted with Conditional Use may not be permitted under any condition to provide additional accessory parking for specific residential or non-residential uses if the number of spaces in the garage, in addition to the accessory parking permitted in the subject project or building, would exceed those amounts permitted as-of-right or as a Conditional Use by Section 151.1.

(B) **Criteria.**

(i) Such facility shall meet all the design requirements for setbacks from facades and wrapping with active uses at all levels per the requirements of Section 145.1; and

(ii) Such parking shall not be accessed from any protected Transit or Pedestrian Street described in Section 155(r); and

(iii) Such parking garage shall be located in a building where the ratio of gross square footage of parking uses to other uses that are permitted or Conditionally permitted in that district is not more than 1 to 1; and

(iv) Such parking shall be available for use by the general public on equal terms and shall not be deeded or made available

exclusively to tenants, residents, owners, or users of any particular use or building except in cases that such parking meets the criteria of subsection (C) or (D) below; and

(v) Such facility shall provide spaces for car sharing vehicles per the requirements of Section 166 and bicycle parking per the requirements of Sections 155.1 and 155.2; and

(vi) Such facility, to the extent open to the public per subsection (iv) above, shall meet the pricing requirements of Section 155(g) and shall generally limit the proposed parking to short-term occupancy rather than long-term occupancy; and

(vii) Vehicle movement on or around the facility does not unduly impact pedestrian spaces or movement, transit service, bicycle movement, or the overall traffic movement in the district; and

(viii) Such facility and its access does not diminish the quality and viability of existing or planned streetscape enhancements.

(C) **Parking of Fleet Vehicles.** Parking of fleet of commercial or governmental vehicles intended for work-related use by employees and not used for parking of employees' personal vehicles may be permitted with Conditional Use provided that the Commission affirmatively finds all of the above criteria except criteria (iv) and (vi).

(D) **Pooled Residential Parking.** Non-accessory parking facilities limited to use by residents, tenants, or visitors of specific off-site development(s) may be permitted with Conditional Use, provided that the Commission affirmatively finds all of the above criteria under (B) except criteria (iv) and (vi), and provided further that the proposed parking on the subject lot would not exceed the maximum amounts permitted by Section 151.1 with Conditional Use or Exceptions under Sections 309.1 and 329 as accessory for the uses in the off-site residential development. For the purpose of this subsection, an "off-site development" is a development which is existing or has been approved by the Planning Commission or Planning Department in the previous 12 months, is located on a lot other than the subject lot, and does not include any off-street parking. A Notice of Special Restrictions shall be recorded on both the off-site and subject development lot indicating the allocation of the pooled parking.

(3) **For Non-Accessory Parking in C-3, RC, NCT, and RTO Districts:**

(A) The rate structure of Section 155(g) shall apply;

(B) The project sponsor has produced a survey of the supply and utilization of all existing publicly-accessible parking facilities, both publicly and privately owned, within one-half mile of the subject site, and has demonstrated that such facilities do not contain excess capacity, including via more efficient space management or extended operations;

(C) In the case of expansion of existing facilities, the facility to be expanded has already maximized capacity through use of all feasible space efficient techniques, including valet operation or mechanical stackers;

(D) The proposed facility meets or exceeds all relevant urban design requirements and policies of this Code and the General Plan regarding wrapping with active uses and architectural screening, and such parking is not accessed from any frontages protected in Section 155(r);

(E) Non-accessory parking facilities shall be permitted in new construction only if the ratio between the amount of Occupied Floor Area of principally or conditionally-permitted non- parking uses to the amount of Occupied Floor Area of parking is at least two to one;

(F) The proposed facility shall dedicate no less than 5% of its spaces for short-term, transient use by car share vehicles as defined in Section 166, vanpool, rideshare, or other co-operative auto programs, and shall locate these vehicles in a convenient and priority location. These spaces shall not be used for long-term storage or to satisfy the requirement of Section 166, but rather are intended for use by short-term visitors and customers. Parking facilities intended for sole and dedicated use as long-term storage for company or government fleet vehicles, and not to be available to the public nor to any employees for commute purposes, are not subject to this requirement;

(G) For new or expanding publicly owned non-accessory parking facilities in the C-3, RC, NCT, and RTO Districts, the following shall also apply:

(i) Expansion or implementation of techniques to increase utilization of existing public parking facilities in the vicinity has been explored in preference to creation of new facilities, and has been demonstrated to be infeasible;

(ii) The City has demonstrated that all major institutions (cultural, educational, government) and employers in the area intended to be served by the proposed facility have Transportation Demand Management programs in place to encourage and facilitate use of public transit, carpooling, car sharing, bicycling, walking, and taxis;

(iii) The City has demonstrated that conflicts with pedestrian, cycling, and transit movement resulting from the placement of driveways and ramps, the breaking of continuity of shopping facilities along sidewalks, and the drawing of traffic through areas of heavy pedestrian concentration, have been minimized, and such impacts have been mitigated to the fullest extent possible; and

(iv) The proposed parking conforms to the objectives and policies of the General Plan and any applicable area plans, and is consistent with the City's transportation management, sustainability, and climate protection goals.

(u) **Accessory Parking Above That Principally Permitted.**

(1) **Residential Uses.**

(A) In granting approval for parking accessory to Residential Uses above that principally permitted in Table 151.1, the Planning Commission shall make the following affirmative findings in addition to those stated in Section 303(c):

(i) For projects with 50 units or more, all residential accessory parking in excess of 0.5 parking spaces for each Dwelling Unit shall be stored and accessed by mechanical stackers or lifts, valet, or other space-efficient means that allow more space above-ground for housing, maximizes space efficiency, and discourages use of vehicles for commuting or daily errands. The Planning Commission may authorize the request for additional parking notwithstanding that the project sponsor cannot fully satisfy this requirement provided that the project sponsor demonstrates hardship or practical infeasibility (such as for retrofit of existing buildings) in the use of space-efficient parking given the configuration of the parking floors within the building and the number of independently accessible spaces above 0.5 spaces per unit is de minimus and subsequent valet operation or other form of parking space management could not significantly increase the capacity of the parking space above the maximums in Table 151.1;

(ii) All parking meets the active use and architectural screening requirements in Section 145.1 and the project sponsor is not requesting any exceptions or variances requiring such treatments elsewhere in this Code;

(iii) Demonstration that trips to the use or uses to be served, and the apparent demand for additional parking, cannot be satisfied by the amount of parking classified by this Code as accessory, by transit service which exists or is likely to be provided in the foreseeable future, by carpool arrangements, by more efficient use of existing on-street and off-street parking available in the area, and by other means;

(iv) Demonstration that the apparent demand for additional parking cannot be satisfied by the provision by the applicant of one or more car-share parking spaces in addition to those that may already be required by Section 166 of this Code;

(v) The absence of potential detrimental effects of the proposed parking upon the surrounding area, especially through unnecessary demolition of sound structures, contribution to traffic congestion, or disruption of or conflict with transit services, walking, and cycling; and

(vi) Accommodating excess accessory parking does not degrade the overall urban design quality of the project proposal nor diminish the quality and viability of existing or planned streetscape enhancements.

(B) **Required Additional Conditions.** Additionally, in granting approval for such accessory parking above that principally permitted, the Commission may require the property owner to pay the annual membership fee to a certified car-share organization, as defined in Section 166(b)(2), for any resident of the project who so requests and who otherwise qualifies for such membership, provided that such requirement shall be limited to one membership per Dwelling Unit, when the following findings are made:

(i) that the project encourages additional private-automobile use, thereby creating localized transportation impacts for the neighborhood; and

(ii) that these localized transportation impacts may be lessened for the neighborhood by the provision of car-share memberships to residents.

(2) **Non-Residential Uses.**

(A) **Criteria.** In granting such Conditional Use, the Planning Commission shall make the following affirmative findings according to the uses to which the proposed parking is accessory:

(i) Vehicle movement on or around the project does not unduly impact pedestrian spaces or movement, transit service, bicycle movement, or the overall traffic movement in the district;

(ii) Accommodating excess accessory parking does not degrade the overall urban design quality of the project proposal;

(iii) All above-grade parking is architecturally screened and lined with active uses according to the standards of Section 145.1, and the project sponsor is not requesting any exceptions or variances requiring such treatments elsewhere in this Code; and

(iv) Excess accessory parking does not diminish the quality and viability of existing or planned streetscape enhancements.

(B) **Conditions.** All Non-Residential Uses exceeding 20,000 square feet shall be subject to the following conditions:

(i) Projects that provide more than 10 spaces for non-residential uses must dedicate 5% of these spaces, rounded down to the nearest whole number, to short-term, transient use by vehicles from certified car sharing organizations per Section 166, vanpool, rideshare, taxis, or other co-operative auto programs. These spaces shall not be used for long-term storage nor satisfy the requirement of Section 166, but rather to park the vehicles during trips to commercial uses. These spaces may be used by shuttle or delivery vehicles used to satisfy Subsection (ii);

(ii) Retail uses larger than 20,000 square feet including but not limited to grocery, hardware, furniture, consumer electronics, greenhouse or nursery, and appliance stores, which sell merchandise that is impractical to carry on public transit, shall offer, at minimal or no charge to its customers, door-to-door delivery service and/or shuttle service. This is encouraged, but not required, for retail uses less than 20,000 square feet;

(iii) Parking shall be limited to short-term use only; and

(iv) Parking shall be available to the general public at times when such parking is not needed to serve the use or uses to which it is accessory.

(v) **Affordable Housing Bonus Projects.** The purpose of this Section 303(v) is to ensure that all Analyzed State Density Bonus Program Projects under Section 206.5 are reviewed in coordination with priority processing available for certain projects with greater levels of affordable housing. While most projects in the Program will likely be somewhat larger than their surroundings in order to facilitate higher levels of affordable housing, the Planning Commission and Department shall ensure that each project is consistent with the Affordable Housing Bonus Design Guidelines and any other applicable design guidelines, as adopted and periodically amended by

the Planning Commission, so that projects respond to their surrounding context, while still meeting the City's affordable housing goals.

(1) **Planning Commission Design Review:** The Planning Commission shall review and evaluate all physical aspects of a State Analyzed Project at a public hearing. The Planning Commission recognizes that most qualifying projects will need to be larger in height and mass than surrounding buildings to achieve the Affordable Housing Bonus Program's affordable housing goals. However, the Planning Commission may, consistent with the Affordable Housing Bonus Program Design Guidelines, and any other applicable design guidelines, and upon recommendation from the Planning Director, make minor modifications to a project to reduce the impacts of such differences in scale.

(2) **Additional Criteria.** In addition to the criteria set forth in subsection (c)(2), the Planning Commission shall consider the extent to which the following criteria are met:

(A) whether the project would require the demolition of an existing building;

(B) whether the project would remove existing commercial or retail uses;

(C) If the project would remove existing commercial or retail uses, how recently the commercial or retail uses were occupied by a tenant or tenants;

(D) whether the project includes commercial or retail uses;

(E) whether there is an adverse impact on the public health, safety, and general welfare due to the loss of commercial or retail uses in the district where the project is located; and

(F) whether any existing commercial or retail use has been designated, or is eligible to be designated, as a Legacy Business under Administrative Code Section 2A.242; or is a formula retail business.

(3) In no case may a project receive a site permit or any demolition permit prior to 18 months from the date of written notification required by 206.5(d)(7).

(w) **Cannabis Retail.** With respect to any application for the establishment of a new Cannabis Retail Use, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall consider the geographic distribution of Cannabis Retail Uses throughout the City, the concentration of Cannabis Retail and Medical Cannabis Dispensary Uses within the general proximity of the proposed Cannabis Retail Use, the balance of other goods and services available within the general proximity of the proposed Cannabis Retail Use, any increase in youth access and exposure to cannabis at nearby facilities that primarily serve youth, and any proposed measures to counterbalance any such increase.

(x) **Medical Cannabis Dispensaries.** With respect to any application for the establishment of a new Medical Cannabis Dispensary Use, in addition to the criteria set forth in subsections (c) and (d) above, the Commission shall consider the concentration of Cannabis Retail and Medical Cannabis Dispensary Uses within the general proximity the proposed Medical Cannabis Dispensary Use.

(y) **Curb Cuts on Restricted Streets.** With respect to an application for a new or expanded curb cut on street frontages subject to Section 155(r), the Planning Commission shall affirmatively find, in addition to those findings in subsections 303(c) and (d) above, that the project meets one or more of the following criteria:

(1) That the restriction on curb cuts at this location would substantially affect access to or operations of emergency services;

(2) That the proposed land use(s) requires off-street parking or loading for disability access under a local, State, or federal law or has an extraordinary need to provide off-street parking or loading for a General Grocery Use, Institutional Use, or PDR Use; and/or

(3) The proposed use necessitates on-site loading spaces in order to prevent a significant negative impact on Muni operations, the safety of pedestrian, cyclists, or traffic hazards.

(z) **Liquor Stores.** With regard to the Conditional Use application for a Liquor Store use, the Planning Commission shall consider, in addition to the criteria set forth in subsection (c) above:

(1) the existing concentration of Liquor Store uses within 300 feet of the proposed location; and

(2) the availability of General Grocery or Specialty Grocery stores in the area selling alcoholic beverages as well as a range of foods.

(aa) **Change in Use or Demolition of Residential Care Facility.** With respect to a change of use from or demolition of a Residential Care Facility, as defined in Sections 102 and 890.50(e) of the Planning Code, including a Residential Care Facility established with or without the benefit of any permits required under the Municipal Code, in addition to the criteria set forth in subsections (c) and (d) of this Section 303, the Commission shall take into account the following factors when considering a Conditional Use Authorization for the change of use or demolition of a Residential Care Facility:

(1) Information provided by the Department of Public Health, the Human Services Agency, the Department of Disability and Aging Services, the Golden Gate Regional Center, and/or the San Francisco Long-Term Care Coordinating Council with regard to the population served, nature and quality of services provided, and capacity of the existing Residential Care Facility;

(2) Data on available beds at licensed Residential Care Facilities within a one-mile radius of the site, and assessment from any of the above agencies regarding whether these available beds are sufficient to serve the need for residential care beds in the neighborhoods served by the Residential Care Facility proposed for a change of use or demolition, and in San Francisco;

(3) Whether the Residential Care Facility proposed for a change of use or demolition will be relocated or its capacity will be

replaced at another Residential Care Facility Use, and whether such relocation or replacement is practically feasible; and

(4) Whether the continued operation of the existing Residential Care Facility by the current operator is practically feasible and whether any other licensed operator or any of the above agencies has been contacted by the applicant seeking the change of use or demolition, or has expressed interest in continuing to operate the facility.

(bb) **Social Service and Philanthropic Facilities in Chinatown Visitor Retail, Chinatown Residential Neighborhood Commercial, and Chinatown Community Business Districts.** With regard to a Conditional Use application for a Social Service or Philanthropic Facility use pursuant to Section 121.4 of this Code, in addition to consideration of the criteria set forth in subsection (c) above, the Planning Commission shall, in order to grant a Conditional Use Authorization, find that the proposed use will primarily serve the Chinatown neighborhood.

(cc) **Parcel Delivery Services.**

(1) **Criteria.** With respect to a Conditional Use application for Parcel Delivery Service use as defined in Section 102 of the Planning Code that is less than 5,000 square feet in size, the Planning Commission shall consider the criteria in subsections (c) and (d) above. With respect to a Conditional Use application for Parcel Delivery Service use that is 5,000 square feet or larger, in addition to the criteria in subsections (c) and (d) above, the Planning Commission shall consider the following:

(A) The extent to which the use will adversely impact traffic patterns and queuing times and add total vehicle miles traveled, including by delivery drivers and couriers operating to and from the site;

(B) The greenhouse gas emissions resulting from operating of the site, including from indirect sources such as courier and delivery vehicles;

(C) The impact that the use will have on public transit, public safety, and emergency response, with particular attention paid to the rate of workplace injury associated with the use and moving violations and traffic accidents requiring public safety or emergency service response; and

(D) The impact on educational institutions located near the site; and

(E) An economic impact study. The Planning Department shall prepare an economic impact study using City staff or shall, consistent with the Charter, select a consultant from a pool of pre-qualified consultants to prepare the economic impact study required by this subsection (cc). The economic impact study shall be considered by the Planning Commission in its review of the application. In the event a consultant is used, the applicant shall bear the cost of paying the consultant for their work preparing the economic impact study, and any necessary documents prepared as part of that study. The study shall evaluate the potential economic impact of the applicant's proposed project, including:

(i) **Employment Analysis.** The report shall include the following employment information: a projection of both construction-related and permanent employment generated by the proposed project, and a discussion of whether the employer of the proposed project will pay a living wage, inclusive of non-salary benefits expected to be provided, relative to San Francisco's cost of living. The employment analysis shall also include a discussion of the past and current employment practices of the proposed operator, if any, including but not limited to artificial intelligence utilization and autonomous vehicles driven in ratio of human-operated activities.

(ii) **Fiscal Impact.** The report shall itemize public revenue created by the proposed project and public services needed because of the proposed project, relative to net fiscal impacts to the General Fund. The impacts to the City's public facilities and infrastructure shall be estimated using the City's current assumptions in existing nexus studies (including area plan, transit, open space in-lieu fee and other impact fees), and should account for any contributions the proposed project would make through such impact fee payments.

(2) **Required Additional Conditions.** All Parcel Delivery Service facilities shall be subject to at least the following conditions of project approval:

(A) **Electrification.** Facilities shall include necessary infrastructure and electrical capacity to accommodate and charge electric vehicles—including electric heavy-duty delivery trucks, employee vehicles, and all other zero-emission vehicles accessing the facility; power refrigeration for refrigerated spaces; and serve any other processes that would otherwise rely upon fossil fuel combustion. Facilities shall install battery storage to address power disruption. Diesel back-up generators shall only be permitted if the facility demonstrates battery storage is infeasible and shall meet CARB's Tier 4 emission standards or meet the most stringent in-use standard, whichever has the least emissions.

(B) **Idling of Vehicles.** To reduce idling emissions from transport trucks, the facility shall have signage placed at truck access points, loading docks, and truck parking areas that clearly notes idling for more than three minutes is strictly prohibited on the subject property. The facility shall fund placement of similar signs installed by the City in the adjacent streets used for access. Each sign placed outside the property should note the California Air Resources Board idling prohibitions on the adjacent streets and include telephone numbers of the building facilities manager and the California Air Resources Board to report violations. All signage should be made of weather-proof materials. All site and architectural plans submitted to the City shall note the locations of these signs.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 69-87, App. 3/13/87; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90; Ord. 47-92, App. 2/14/92; Ord. 304-99, File No. 990495, App. 12/3/99; Ord. 311-99, File No. 991585, App. 12/3/99; Ord. 169-00, File No. 991953, App. 7/7/2000; Ord. 259-00, File No. 001422, App. 11/17/2000; Ord. 77-02, File No. 011448, App. 5/24/2002; Ord. 43-03, File No. 021772, App. 4/3/2003; Ord. 62-04, File No. 031501, App. 4/9/2004; Ord. 89-04, File No. 031463, App. 5/27/2004; Ord. 270-04, File No. 041070, App. 11/9/2004; Ord. 140-06, File No. 052921, App. 6/22/2006; Ord. 298-06, File No. 061261, App. 12/12/2006; Ord. 72-08, File No. 071157, App. 4/3/2008; Ord. 112-08, File No. 080095, App. 6/30/2008; Ord. 244-08, File No. 080567, App. 10/30/2008; Ord. 245-08, File No. 080696; Ord. 139-09, File No. 090402, App. 7/2/2009; Ord. 140-11, File No. 110482, App. 7/5/2011, Eff. 8/4/2011; Ord. 75-12 , File No. 120084, App. 4/23/2012, Eff. 5/23/2012; Ord. 106-12 , File No. 120047, App. 6/22/2012, Eff. 7/22/2012; Ord. 182-12 , File No. 120665, App. 8/8/2012, Eff. 9/7/2012; Ord. 56-13 , File No. 130062, App. 3/28/2013, Eff. 4/27/2013; Ord. 248-13 , File No. 130372, App. 11/8/2013, Eff. 12/8/2013; Ord. 235-14 , File No. 140844, App. 11/26/2014, Eff. 12/26/2014; Ord. 235-14 , File No. 140844, App. 11/26/2014, Eff. 12/26/2014; Ord. 22-15, File No. 141253, App. 2/20/2015, Eff. 3/22/2015; Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015; Ord. 166-16 , File No. 160477, App. 8/11/2016, Eff. 9/10/2016; Ord. 99-17, File No. 170206, App. 5/19/2017, Eff. 6/18/2017; Ord. 116-17, File No. 150969, App. 6/13/2017, Eff. 7/13/2017; Ord. 129-17, File No. 170203, App. 6/30/2017, Eff. 7/30/2017; Ord. 205-17, File No. 170418, App. 11/3/2017, Eff. 12/3/2017; Ord. 229-17, File No. 171041, App. 12/6/2017, Eff. 1/5/2018; Ord. 198-18, File

No. 180456, App. 8/10/2018, Eff. 9/10/2018; Ord. 277-18, File No. 180914, App. 11/20/2018, Eff. 12/21/2018; Ord. 179-18, File No. 180423, App. 7/27/2018, Eff. 8/27/2018, Oper. 1/1/2019; Ord. 182-19, File No. 190248, App. 8/9/2019, Eff. 9/9/2019; Ord. 63-20, File No. 200077, App. 4/24/2020, Eff. 5/25/2020; Ord. 149-21, File No. 210535, App. 9/29/2021, Eff. 10/30/2021; Ord. 197-21, File No. 210600, App. 11/5/2021, Eff. 12/6/2021; Ord. 233-21, File No. 210381, App. 12/22/2021, Eff. 1/22/2022; Ord. 37-22, File No. 211263, App. 3/14/2022, Eff. 4/14/2022; Ord. 75-22, File No. 220264, App. 5/13/2022, Eff. 6/13/2022; Ord. 70-23, File No. 220340, App. 5/3/2023, Eff. 6/3/2023; Ord. 47-24, File No. 231223, App. 3/15/2024, Eff. 4/15/2024; Ord. 54-24, File No. 240169, App. 3/22/2024, Eff. 4/22/2024, Retro. 3/30/2024; Ord. 113-24, File No. 240193, App. 6/13/2024, Eff. 7/14/2024, Retro. 3/30/2024; Ord. 297-24, File No. 241055, App. 12/19/2024, Eff. 1/19/2025; Ord. 37-25, File No. 240787, App. 4/3/2025, Eff. 5/4/2025)

AMENDMENT HISTORY

[Former] division (i) and division (l)(5)(A) amended; Ord. 140-11, Eff. 8/4/2011. [Former] division (i) amended; [former] division (p) added; Ord. 75-12 , Eff. 5/23/2012. [Former] division (i) amended; Ord. 106-12 , Eff. 7/22/2012. [Former] division (g)(1)(D) added; [former] divisions (g)(2) and (g)(3) amended; Ord. 182-12 , Eff. 9/7/2012. Divisions (c)(3), (c)(4), (c)(5)(A), (c)(5)(A)(i), and [former] (i) amended; former divisions (j)(A)-(D) redesignated as [former] (j)(1)-(4); [former] divisions (k)(1), (l)(3), (l)(5), (n)(1), and (o)(1) amended; Ord. 56-13 , Eff. 4/27/2013. [Former] division (i) amended; Ord. 248-13 , Eff. 12/8/2013. Former division (i) deleted; former division (j) redesignated as current division (i) and new division (i)(5) added; former divisions (k)-(o) redesignated as current divisions (j)-(n) and internal references adjusted accordingly; former divisions (p) and (p)(1)(A) redesignated as current divisions (o) and [former] (o)(1); Ord. 235-14 , Eff. 12/26/2014. Former division (c)(1)(A) merged into division (c)(1) and amended; former divisions (c)(1)(A)(i)-(iii) redesignated as (c)(1)(A)-(C); divisions (c)(4) and (c)(5) amended; former division (c)(6) deleted; divisions (f)(1)-(3) amended; former division (g)(1) merged into division (g) and former divisions (g)(1)(A)-(D) redesignated as (g)(1)-(4); former divisions (g)(2) and (g)(3) deleted; divisions (h)(1), (h)(3)(A)-(C), (j), and (j)(1) amended; former division (j)(1)(A)(i) merged into division (j)(1)(A) and amended; divisions (j)(1)(B), (l), and (l)(1) amended; former division (l)(1)(A)(i) merged into division (l)(1)(A) and amended; divisions (m)(1), (n)(1), and (n)(1)(A) amended; former division (o)(1) merged into division (o) and amended; divisions (p) and (q) added; Ord. 22-15, Eff. 3/22/2015. Divisions (n)(1)(A), (p), (p)(1), and (p)(2) amended; division (r) added; Ord. 188-15 , Eff. 12/4/2015. Division (s) added; Ord. 166-16 , Eff. 9/10/2016. Divisions (t) and (u) added; Ord. 99-17 , Eff. 6/18/2017. [Former] division (t) added; Ord. 116-17 , Eff. 7/13/2017. Divisions (a), (b), (c), (d), (e), (f)-(f)(5)(B), amended; former division (j)(1) merged into division (j) and amended; former divisions (j)(1)(A)-(C) redesignated as (j)(1)-(3); divisions (k)(1), (k)(2), (k)(4)(B), (k)(4)(B)(iv), and (k)(6) amended; former division (l)(1) merged into division (l), former divisions (l)(1)(A)-(B) redesignated as (l)(1)-(2), and current divisions (l)-(l)(2) amended; former division (n)(1) merged into division (n), former divisions (n)(1)(A)-(D) redesignated as (n)(1)-(4), and former divisions (n)(1)(B)(i)-(iii) redesignated as (n)(2)(A)-(C); current divisions (n), (n)(1), (n)(2)(A), and (n)(2)(C) amended; divisions (p), (p)(1), (p)(2), (p)(3), and (r) amended; Ord. 129-17 , Eff. 7/30/2017. Divisions (a), (f), and (o) amended; Ord. 205-17 , Eff. 12/3/2017. Second division (t) redesignated as (v) and related references amended; divisions (w) and (x) added; Ord. 229-17, Eff. 1/5/2018. Divisions (v) and (v)(1) amended; former divisions (v)(1)(A)- (v)(2)(G) deleted; former divisions (v)(3)-(v)(3)(F) and (v)(4) redesignated as (v)(2)-(v)(2)(F) and (v)(3); current division (v)(3) amended; Ord. 198-18, Eff. 9/10/2018. Divisions (y)-(y)(3) added; Ord. 277-18, Eff. 12/21/2018. Division (f)(2) amended; Ord. 179-18, Oper. 1/1/2019. Divisions (z)-(z)(B)[1] added; Ord. 182-19 , Eff. 9/9/2019. Exceptions (1)-(3) appended to division (n); divisions (z)(A) and (z)(B) redesignated as (z)(1) and (z)(2); Ord. 63-20, Eff. 5/25/2020. Division (aa) added; Ord. 149-21, Eff. 10/30/2021. Division (bb) added; Eff. 12/6/2021. Division (n)(1) deleted; divisions (n)(2)-(4) redesignated as (n)(1)-(3); division (n) Exceptions (1)(A) and (3) deleted; division (n) Exception (1)(B) merged into Exception (1); current division (n) Exceptions (1) and (2) amended; Ord. 233-21, Eff. 1/22/2022. Division (n) amendments reapplied; Exception (1) further amended; Ord. 37-22, Eff. 4/14/2022. Divisions (p), (p)(1), (p)(1)(D), (p)(2) amended; new division (p)(3) added; former division (p)(3) redesignated as (p)(4); Ord. 75-22, Eff. 6/13/2022. Divisions (p)(1)(A)-(D) deleted; divisions (p)-(p)(1) amended as (p); division (p)(2) amended as (p)(2)-(p)(2)(A); divisions (p)(1), (p)(2)(B), and (p)(5) added; Ord. 70-23, Eff. 6/3/2023. Divisions (cc)- (cc)(2)(B) added; Ord. 47-24, Eff. 4/15/2024; and Ord. 54-24, Retro. 3/30/2024. Division (cc)(1)(D) redesignated as (cc)(1)(E); new division (cc)(1)(D) added; division (cc)(1)(E)(i) amended; Ord. 113-24, Eff. 7/14/2024, Retro. 3/30/2024. Divisions (i) and (i)(5) amended; Ord. 297-24, Eff. 1/19/2025. Divisions (a), (g), (g)(2)-(3) amended; division (g)(4) deleted; Ord. 37-25, Eff. 5/4/2025.

*** Editor's Note:**

Prior to the effectiveness of Ord. *235-14* , this Sec. 303(i) pertained to formula retail uses. That ordinance deleted those provisions from this section and enacted new Sec. 303.1 ("Formula Retail Uses").

EXHIBIT 20

SEC. 101. PURPOSES.

This Planning Code is adopted to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare, and for the following more particularly specified purposes:

(a) To guide, control and regulate future growth and development in accordance with the General Plan of the City and County of San Francisco;

(b) To protect the character and stability of residential, commercial and industrial areas within the City, and to promote the orderly and beneficial development of such areas;

(c) To provide adequate light, air, privacy and convenience of access to property, and to secure safety from fire and other dangers;

(d) To prevent overcrowding the land and undue congestion of population;

(e) To regulate the location of buildings and the use of buildings and land adjacent to streets and thoroughfares, in such manner as to obviate the danger to public safety caused by undue interference with existing or prospective traffic movements on such streets and thoroughfares.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015)

AMENDMENT HISTORY

- Introductory paragraph and division (a) amended; Ord. 188-15 , Eff. 12/4/2015.

SEC. 101.1. GENERAL PLAN CONSISTENCY AND IMPLEMENTATION.

(See Interpretations related to this Section.)

(a) The General Plan shall be an integrated, internally consistent and compatible statement of policies for San Francisco. To fulfill this requirement, after extensive public participation and hearings, the Planning Commission shall in one action amend the General Plan by January 1, 1988.

(b) The following Priority Policies are hereby established. They shall be included in the preamble to the General Plan and shall be the basis upon which inconsistencies in the General Plan are resolved:

(1) That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses enhanced;

(2) That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods;

(3) That the City's supply of affordable housing be preserved and enhanced;

(4) That commuter traffic not impede Muni transit service or overburden our streets or neighborhood parking;

(5) That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced;

(6) That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake;

(7) That landmarks and historic buildings be preserved; and,

(8) That our parks and open space and their access to sunlight and vistas be protected from development.

(c) The City may not adopt any zoning ordinance or development agreement authorized pursuant to Government Code Section 65865 after November 4, 1986, unless prior to that adoption it has specifically found that the ordinance or development agreement is consistent with the Priority Policies established above.

(d) The City may not adopt any zoning ordinance or development agreement authorized pursuant to Government Code Section 65865 after January 1, 1988, unless prior to that adoption it has specifically found that the ordinance or development agreement is consistent with the General Plan.

(e) Prior to issuing a permit for any project or adopting any legislation which requires an initial study under the California Environmental Quality Act, and prior to issuing a permit for any demolition, conversion or change of use, and prior to taking any action which requires a finding of consistency with the General Plan, the City shall find that the proposed project or legislation is consistent with the Priority Policies established above. For any such permit issued or legislation adopted after January 1, 1988 the City shall also find that the project is consistent with the General Plan.

(Added by Proposition M, 11/4/86; amended by Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015)

AMENDMENT HISTORY

- Divisions (a), (b), (d), and (e) amended; Ord. 188-15 , Eff. 12/4/2015.

SEC. 102. DEFINITIONS.

(See Interpretations related to this Section.)

For the purposes of this Code, certain words and terms used herein are defined as set forth in this and the following sections. Additional definitions applicable to Signs are set forth in Section 602. Additional definitions applicable to development impact fees and requirements that authorize the payment of in-lieu fees are set forth in Section 401. Additional definitions applicable only to Downtown Residential Districts are set forth in Section 890. Additional definitions applicable only to the North Beach Neighborhood Commercial District and the North Beach Special Use District are set forth in Section 780.3. Additional definitions applicable only to the Bernal Heights Special Use District are set forth in Section 242. Additional definitions applicable only to Article 9, Mission Bay Districts, are set forth in Section 996. All words used in the present tense shall include the future. All words in the plural number shall include the singular number, and all words in the singular number shall include the plural number, unless the natural construction of the wording indicates otherwise. The word "shall" is mandatory and not directory. Whenever any of the following terms is used it shall mean the corresponding officer, department, board or commission or its successor of the City and County of San Francisco, State of California, herein referred to as the City: Assessor, Board of Supervisors, Planning Department, Department of Public Works, Director of Planning, Planning Commission, or Zoning Administrator. In each case, the term shall be deemed to include an employee of any such officer or department of the City who is lawfully authorized to perform any duty or exercise any power as a representative or agent of that officer or department.

(Amended by Ord. 217-16; Ord. 129-17; Ord. 70-23; see Sec. 102 history note.)

A

Accessory Use. A related minor Use that is either necessary to the operation or enjoyment of a lawful Principal Use or Conditional Use, or appropriate, incidental, and subordinate to any such use, and is located on the same lot. Accessory Uses are regulated by Sections 204 through 204.5 and Sections 703(d), 803.2(d), 803.3(b)(1)(C), 825(c)(1)(C), and 986 of this Code.

(Added by Ord. 129-17; amended by Ord. 202-18; 208-19; Ord. 63-20; see Sec. 102 history note.)

Adjacent Building. Generally, a building on a lot adjoining the subject lot along a side lot line.

Adult Business. A Retail Sales and Service Use that includes the following: adult bookstore or adult video store, as defined by Section 791 of the Police Code; adult theater, as defined by Section 791 of the Police Code; and encounter studio, as defined by Section 1072.1 of the Police Code. Such use shall be located no less than 1,000 feet from another Adult Business use.

Adult Sex Venue [2] A Retail Sales and Service Use that operates pursuant to Health Code Article 47 [2] An Adult Sex Venue may include bathhouse facilities such as pools, tubs, or steam rooms, and is eligible for a Limited Live Performance permit.

(Added by Ord. 75-22; see Sec. 102 history note.)

Agricultural and Beverage Processing 1. An Industrial use that involves the processing of agricultural products and beverages with a low potential for noxious fumes, noise, and nuisance to the surrounding area, including but not limited to bottling plants, breweries, dairy products plant, malt manufacturing or processing plant, fish curing, smoking, or drying, cereal manufacturing, liquor distillery, manufacturing of felt or shoddy, processing of hair or products derived from hair, pickles, sauerkraut, vinegar, yeast, soda or soda compounds, meat products, and fish oil. This use does not include the processing of wood pulp, and is subject to the operating conditions outlined in Section 202.2(d).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agricultural and Beverage Processing 2. An Industrial Use that involves the processing of agricultural products and beverages with a high potential for noxious fumes, noise, and nuisance to the surrounding area, including but not limited to a flour mill; sugar refinery; manufacturer of cannabis products or extracts that are derived by using volatile organic compounds (any use requiring License Type 7—Manufacturer 2, as defined in California Business and Professions Code, Division 10); and facility for wool pulling or scouring. This use does not include the processing of wood pulp, and is subject to the operating conditions outlined in Section 202.2(d).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture. A Use Category that includes Industrial Agriculture, Neighborhood Agriculture, and Large-Scale Urban Agriculture.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Industrial. An Agricultural use that involves the cultivation of plants for wholesale sales or industrial uses. This use includes, but is not limited to, plant nurseries and cannabis cultivation operations, and is subject to the location and operating conditions listed in Section 202.2(c). For the cultivation of cannabis, this definition includes all cultivation pursuant to state license types that allow for indoor and/or mixed-light cultivation with up to 22,000 sq. ft. of canopy.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Large-Scale Urban. An Agricultural Use that is characterized by the use of land for the production of food or horticultural crops to be harvested, sold, donated, or otherwise not used or consumed by the operator of the premises that occur: (a) on a plot of land one acre or larger or (b) on smaller parcels that cannot meet the physical and operational standards for Neighborhood Agriculture. This use is subject to location and operational conditions outlined in Section 202.2(c) and does not include any cannabis-related use or any other agricultural activities, including the cultivation of cannabis for personal use.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Neighborhood. An Agricultural Use that occupies less than one acre for the production of food or horticultural crops to be harvested, sold, or donated and complies with the con trols and standards herein. The use includes, but is not limited to, home, kitchen,

and roof gardens. Farms that qualify as Neighborhood Agricultural Use may include, but are not limited to, community gardens, community-supported agriculture, market gardens, and private farms. Neighborhood Agricultural Use may be principal or accessory use. This use is subject to location and operational conditions outlined in Section 202.2(c) and does not include any cannabis-related use or any other agricultural activities, including the cultivation of cannabis for personal use.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Agriculture, Urban. Any subgrouping of Agricultural Uses that includes either Neighborhood Agriculture or Large-Scale Urban Agriculture.

Alley. A right-of-way, less than 30 feet in width, permanently dedicated to common and general use by the public.

Ambulance Service. See Service, Ambulance.

Animal Hospital. A Retail Sales and Service Use that provides medical care and accessory boarding services for animals, not including a Kennel.

Arts Activities. A retail Entertainment, Arts and Recreation Use that includes performance, exhibition (except exhibition of films), rehearsal, production, post-production and some schools of any of the following: dance; music; dramatic art; film; video; graphic art; painting; drawing; sculpture; small-scale glassworks; ceramics; textiles; woodworking; photography; custom-made jewelry or apparel; and other visual, performance, and sound arts and craft. It shall exclude accredited Schools and Post-Secondary Educational Institutions. It shall include commercial arts and art-related business service uses including, but not limited to: recording and editing services; small-scale film and video developing and printing; titling; video and film libraries; special effects production; fashion and photo stylists; production, sale, and rental of theatrical wardrobes; and studio property production and rental companies. Arts spaces shall include studios, workshops, archives, and theaters, and other similar spaces customarily used principally for arts activities, exclusive of a Movie Theater, General Entertainment, arcades that provide eleven or more amusement game devices, Adult Business, and any other establishment where liquor is customarily served during performances.

(Amended by Ord. 129-17; Ord. 202-18; Ord. 285-18; Ord. 205-19; see Sec. 102 history note.)

Automobile Assembly. An Industrial Use that involves the assembly of parts for the purpose of manufacturing automobiles, trucks, buses, or motorcycles. This use is subject to operational and location restrictions outlined in Section 202.2(d) of this Code.

Automobile Wrecking. An Industrial Use that includes the storage of vehicles in not in operational condition and/or sale of used automobile parts, or for the storage, dismantling, or abandonment of junk, automobiles, trailers, machinery or parts thereof. This use is subject to operational and location restrictions outlined in Section 202.2(d) of this Code.

Automobile Sale or Rental. A Retail Automotive Use that provides vehicle sales or rentals within a building or on an open lot.

Automotive Repair. A Retail Automotive Use that provides any of the following automotive repair services, when conducted within an enclosed building having no openings, other than fixed windows or exits required by law, located within 50 feet of any R District: minor auto repair, engine repair, rebuilding, or installation of power train components, reconditioning of badly worn or damaged motor vehicles, collision service, or full body paint spraying. It may include other services for automobiles including, but not limited to, accessory towing, if all towed vehicles stored on the premises are limited to those vehicles that are to be repaired on the premises.

Automotive Service. A subgrouping of Retail Automotive Uses providing services for motor vehicles that includes Gas Station, Automotive Service Station, Automotive Repair, and Automotive Wash.

(Amended by Ord. 188-15; see Sec. 102 history note.)

Automotive Service Station. A Retail Automotive Use that provides motor fuels and lubricating oils directly into motor vehicles and minor auto repairs (excluding engine repair, rebuilding, or installation of power train components, reconditioning of badly worn or damaged motor vehicles, collision service, or full body paint spraying) and services that remain incidental to the principal sale of motor fuel. Repairs shall be conducted within no more than three enclosed service bays in buildings having no openings, other than fixed windows or exits required by law, located within 40 feet of any R District. It may include other incidental services for automobiles including, but not limited to, accessory towing, if the number of towing vehicles does not exceed one, and all towed vehicles stored on the premises are limited to those vehicles that are to be repaired on the premises. This use is subject to the controls in Sections 187.1 and 202.2(b).

(Amended by Ord. 188-15; Ord. 129-17; Ord. 264-22; see Sec. 102 history note.)

Automotive Use. A Commercial Use category that includes Automotive Repair, Ambulance Services, Automobile Sale or Rental, Automotive Service Station, Automotive Wash, Electric Vehicle Charging Location, Fleet Charging, Gas Station, Parcel Delivery Service, Private Parking Garage, Private Parking Lot, Public Parking Garage, Public Parking Lot, Vehicle Storage Garage, Vehicle Storage Lot, and Motor Vehicle Tow Service. All Automotive Uses that have Vehicular Use Areas defined in this Section of the Code shall meet the screening requirements for vehicular use areas in Section 142.

(Amended by Ord. 202-18; Ord. 190-22; see Sec. 102 history note.)

Automotive Use, Non-Retail. A subcategory of Automotive Use that includes Ambulance Services, Fleet Charging, Parcel Delivery Service, Private Parking Garage, Private Parking Lot, and Motor Vehicle Tow Service.

(Amended by Ord. 202-18; Ord. 190-22; see Sec. 102 history note.)

Automotive Use, Retail. A subcategory of Automotive Use that includes Automotive Repair, Automotive Sale or Rental, Automobile Service Station, Automotive Wash, Electric Vehicle Charging Location, Gas Station, Public Parking Garage, Public Parking Lot, Vehicle Storage Garage, and Vehicle Storage Lot.

(Amended by Ord. 190-22; see Sec. 102 history note.)

Automotive Wash. A Retail Automotive Use that provides cleaning and polishing of motor vehicles, including self-service operations. This use is subject to the location and operational restrictions in Section 202.2(e).

Awning. A light roof-like structure, supported entirely by the exterior wall of a building; consisting of a fixed or movable frame covered with cloth, plastic, or metal; extending over doors, windows, and/or show windows; with the purpose of providing protection from sun and rain and/or embellishment of the façade; as further regulated in Section 3105 of the Building Code.

B

Bar. A Retail Sales and Service Use that provides on-site alcoholic beverage sales for drinking on the premises, including bars serving beer, wine, and/or liquor to the customer where no person under 21 years of age is admitted (with Alcoholic Beverage Control [ABC] license types 23, 42, 48, or 61), drinking establishments serving beer where minors are present (with ABC license types 40 or 60) in conjunction with other uses such as Movie Theaters and General Entertainment, and bars serving wine operated by licensed winegrowers (with ABC license type 02). Such businesses shall operate with the specified conditions in Section 202.2(a). A non-profit theater that provides on-site alcoholic beverage sales only for consumption by ticket-holding patrons on the premises, with ABC license type 64, shall not be considered a Bar use. A music entertainment facility that is authorized to sell beer, wine, and distilled spirits at retail for consumption on the premises, with ABC license type 90, shall not be considered a Bar use.

(Amended by Ord. 188-15; Ord. 205-19; Ord. 249-23; see Sec. 102 history note.)

Basement. See Story.

Bedroom. A room primarily used for sleeping that meets the minimum requirements as defined in the Building Code for sleeping rooms.

Board of Supervisors (Board). The Board of Supervisors of the City and County of San Francisco.

Bona Fide Eating Place. A place that is regularly and in a bona fide manner used and kept open for the service of meals to guests for compensation and that has suitable kitchen facilities connected therewith, containing conveniences for cooking of an assortment of foods that may be required for ordinary meals.

(a) "Meals" shall mean an assortment of foods commonly ordered at various hours of the day for breakfast, lunch, or dinner. Incidental food service, comprised only of appetizers to accompany drinks, is not considered a meal. Incidental, sporadic, or infrequent sales of meals or a mere offering of meals without actual sales is not compliance.

(b) "Guests" shall mean persons who, during the hours when meals are regularly served therein, come to a bona fide public eating place for the purpose of obtaining, and actually order and obtain at such time, in good faith, a meal therein. Nothing in this section, however, shall be construed to require that any food be sold or purchased with any beverage.

(c) Actual and substantial sales of meals are required, during the normal days and meal hours that a bona fide public eating place is open, provided that "normal days of operation" shall mean a minimum of five days a week and "normal hours" of operation for meal service shall mean approximately 7:00 a.m. to 11:00 a.m. if open for breakfast; 11:00 a.m. to 2:00 p.m. if open for lunch; or 5:00 p.m. to 10:00 p.m. if open for dinner.

(d) The premises must be equipped and maintained in good faith. This means the premises must possess working refrigeration and cooking devices, pots, pans, utensils, table service, condiment dispensers, menus, signs, and enough goods to make substantial meals. The premises must comply with all regulations of the Department of Public Health.

(e) The establishment must secure significant revenue from food and non-alcoholic beverage sales. Significant revenue from food and non-alcoholic beverage sales shall mean either:

(1) A minimum of 51% of the establishment’s gross receipts shall be from food sales prepared and sold to guests on the premises. Records of the establishment’s gross receipts shall be provided to the Department upon request; or

(2) Annual gross food and non-alcoholic beverage sales prepared and sold to guests on the premises of at least $4,200 per occupant based on the premises’ maximum occupant load as determined and approved by the Fire Department and Department of Building Inspection. Records of the establishment’s gross sales shall be provided to the Department upon request. The Zoning Administrator may adjust the amount of $4,200 per occupant each year, provided that such adjustments are supported by specific financial and economic criteria, including but not limited to a review of the restaurant market, costs, prices, profits, and loses,[1] and recognizing the differences in sizes and types of establishments.

(f) A "bona fide eating place" does not include an Adult Business as defined in this Section of the Code.

(g) For a place that has also established a Nighttime Entertainment Use and that only provides on-site alcoholic beverage sales for consumption by ticket-holding patrons on the premises during the normal hours of operation of entertainment activities, paragraphs (c) and (e) do not apply, but actual and substantial sales of meals are required during the normal hours of operation. For purposes of this paragraph, the “normal hours of operation” shall include two hours prior to, and one hour after, entertainment activities, but may not exceed eight total hours in a calendar day. This paragraph (g) does not apply to a place located in the Broadway Neighborhood Commercial District, North Beach Neighborhood Commercial District, Pacific Avenue Neighborhood Commercial District, or Polk Street Neighborhood Commercial District.

(Amended by Ord. 205-19; Proposition H, 11/3/2020; see Sec. 102 history note.)

Building. Any structure having a roof supported by columns or walls.

C

Cannabis Retail. A Retail Sales and Service Use that sells or otherwise provides cannabis and cannabis-related products for adult use, and that may also include the sale or provision of cannabis for medicinal use. A Cannabis Retail establishment may only be operated by the holder of (a) a valid license from the State of California (License Type 10—Retailer, as defined in California Business and Professions Code, Division 10) and (b) a valid permit from the City's Office of Cannabis. This use is subject to operating and location restrictions set forth in Section 202.2(a).

(Added by Ord. 229-17; see Sec. 102 history note.)

Canopy. A light roof-like structure, supported by the exterior wall of a building and on columns or wholly on columns, consisting of a fixed or movable frame covered with approved cloth, plastic or metal, extending over entrance doorways only, with the purpose of providing protection from sun and rain and/or embellishment of the façade, as further regulated in Section 3105 of the Building Code.

Catering. A Non-Retail Sales and Service Use that involves the preparation and delivery of goods including the following items: food, beverages; balloons, flowers, plants, party decorations and favors; or cigarettes/candy.

Chair/Foot Massage. See Massage, Chair/Foot.

Child Care Facility. An Institutional Community Use defined in California Health and Safety Code Section 1596.750 that provides less than 24-hour care for children by licensed personnel and meets the open-space and other requirements of the State of California and other authorities.

City. The City and County of San Francisco.

Commercial to Residential Adaptive Reuse. Commercial to Residential Adaptive Reuse shall mean to change the use of an existing Gross Floor Area from a non-residential use, other than a hotel use, to a residential use pursuant to Section 210.5.

(Added by Ord. 122-23; Ord. 159-23; see Sec. 102 history note.)

Commercial Use. A land use with the sole or chief emphasis on making financial gain, including but not limited to Agricultural Uses, Industrial Uses, Sales and Service Uses, Retail Entertainment Uses, and Auto Uses.

Commission. The San Francisco Planning Commission.

Community Facility. An Institutional Community Use that includes community clubhouses, neighborhood centers, community cultural centers, or other community facilities not publicly owned but open for public use in which the chief activity is not carried on as a gainful business and whose chief function is the gathering of persons from the immediate neighborhood in a structure for the purposes of recreation, culture, social interaction, health care, or education other than Institutional Uses as defined in this Section.

Community Facility, Private. An Institutional Community Use that includes a private lodge, private clubhouse, and private recreational facility other than a Community Facility as defined in this section, and which is not operated as a gainful business.

Community Recycling Collection Center. A Utility and Infrastructure Use that collects, stores, or handles recyclable materials, including glass and glass bottles, newspaper, aluminum, paper and paper products, plastic and other materials which may be processed and recovered, if within a completely enclosed container or building, having no openings other than fixed windows or exits required by law, provided that: (1) Flammable materials are collected and stored in metal containers; and (2) Collection hours are limited to 9:00 a.m. to 7:00 p.m. daily. It does not include the storage, exchange, packing, disassembling or handling of junk, waste, used furniture and household equipment, used cars in operable condition, used or salvaged machinery, or salvaged house-wrecking and structural steel materials and equipment.

Condition(s) of Approval. A condition or set of written conditions imposed by the Planning Commission or another permit-approving or issuing City agency or appellate body to which a project applicant agrees to adhere and fulfill when it receives approval for the construction of a development project subject to this Article.

Conditional (or Conditionally Permitted) Use. Conditional Use allows the Planning Commission to consider uses or projects that may be necessary or desirable in a particular neighborhood, but which are not allowed as a matter of right within a particular zoning district. Whether a use is conditional in a given district is indicated in this Code. Sections of this Code that govern Conditional Uses include, but are not limited to Sections 178, 179, 303, and 303.1.

(Added by Ord. 129-17; amended by Ord. 208-19; see Sec. 102 history note.)

Corner Lot. See Lot, Corner.

Cottage Food Operation. An Accessory Use to a Dwelling Unit as defined in Section 113758 of the California State Health and Safety Code.

Court. Any space on a lot other than a yard that, from a point not more than two feet above the floor line of the lowest story in the building on the lot in which there are windows from rooms abutting and served by the court, is open and unobstructed to the sky, except for obstructions permitted by this Code. An "outer court" is a court, one entire side or end of which is bounded by a front setback, a rear yard, a side yard, a front lot line, a street, or an alley. An "inner court" is any court that is not an outer court.

D

DBI. The San Francisco Department of Building Inspection or its successor.

Department. See Planning Department.

"Development Application" shall mean any application for a building permit, site permit, Conditional Use, Variance, Large Project Authorization, HOME-SF Project Authorization, authorization pursuant to Planning Code Sections 305.1, 309, 309.1, or 322, or for any

other authorization of a development project required to be approved by the Zoning Administrator or Planning Commission.

(Added by Ord. 15-19; see Sec. 102 history note.)

Development Impact Fee. A fee imposed on a development project as a condition of approval to mitigate the impacts of increased demand for public services, facilities, or housing caused by the development project that may or may not be an impact fee governed by the California Mitigation Fee Act (California Government Code Section 66000, *et seq.*).

Design Professional. A Non-Retail Sales and Service Use that provides professional design services to the general public or to other businesses and includes architectural, landscape architectural, engineering, interior design, and industrial design services. It does not include (1) the design services of graphic artists or other visual artists which are included in the definition of Arts Activities; or (2) the services of advertising agencies or other services which are included in the definition of Retail Professional Service or Non-Retail Professional Service, Financial Service, or Health Service. Design Professional Uses in Neighborhood Commercial Districts are subject to the operating restrictions outlined in Section 202.2(i).

(Amended by Ord. 202-18; Ord. 233-21; Ord. 37-22; Ord. 249-23; see Sec. 102 history note.)

Designated Child Care Unit. A Dwelling Unit that is designated for use as a State-licensed Small Family Child Care Home and meets the applicable standards established in Section 414A.6.

(Added by Ord. 7-19; see Sec. 102 history note.)

Diagonal Dimension. See Plan Dimensions.

(Added by Ord. 206-19; see Sec. 102 history note.)

Director. The Director of the Planning Department or his or her designee.

District. A portion of the territory of the City, as shown on the Zoning Map, within which certain regulations and requirements or various combinations thereof apply under the provisions of this Code. The term "district" shall include any use, special use, height and bulk, or special sign district. The classes of use districts are described in Section 201 of this Code.

Drive-Up Facility. A Use Characteristic that includes a structure designed for drive-to or drive-through trade which provides service to patrons while in private motor vehicles, excluding Automotive Gas Station, Automotive Service Station, Automotive Repair, and Automotive Wash.

DPW. The Department of Public Works or its successor.

Dwelling. A building, or portion thereof, containing one or more Dwelling Units. A "one-family dwelling" is a building containing exclusively a single Dwelling Unit. A "two-family dwelling" is a building containing exclusively two Dwelling Units. A "three-family dwelling" is a building containing exclusively three Dwelling Units.

Dwelling Unit. A Residential Use defined as a room or suite of two or more rooms that is designed for, or is occupied by, one family doing its own cooking therein and having only one kitchen. A Dwelling Unit shall also include “employee housing” when providing accommodations for six or fewer employees, as provided in State Health and Safety Code §17021.5. A housekeeping room as defined in the Housing Code shall be a Dwelling Unit for purposes of this Code. For the purposes of this Code, a Live/Work Unit, as defined in this Section, shall not be considered a Dwelling Unit.

(Amended by Ord. 248-23; see Sec. 102 history note.)

Dwelling Unit, Accessory, or ADU. Also known as a Secondary Unit or In-Law Unit, is a Dwelling Unit that meets all the requirements of Section 207.1 or Section 207.2 and that is accessory to at least one other Dwelling Unit on the same lot. A detached ADU shall not share structural walls with the primary structure on the lot. Height for detached ADUs located outside the buildable area shall be measured from existing grade at any given point to either a) the highest point of a finished roof in the case of a flat roof or b) the average height of a pitched roof or stepped roof, or similarly sculptured roof form. Height for detached ADUs located outside the buildable area shall not be eligible for any exemptions described in Planning Code subsection 260(b).

(Added by Ords. 161-15 and 162-15; amended by Ord. 162-16; Ord. 95-17; Ord. 195-18; Ord. 116-19; Ord. 53-23; Ord. 62-24; see Sec. 102 history note.)

Dwelling Unit, Junior Accessory, or JADU. A Dwelling Unit that meets all the requirements of Section 207.2, and that:

(a) is accessory to at least one other Dwelling Unit on the same lot;

(b) is no more than 500 square feet of Gross Floor Area;

(c) is contained entirely within an existing or proposed single-family structure;

(d) may include separate sanitation facilities, or may share sanitation facilities with the existing structure;

(e) is owner-occupied, unless the owner resides in the remaining portion of the structure; provided, however, that owner-occupancy shall not be required if the owner is a governmental agency, land trust, or housing organization;

(f) includes an entrance to the Junior Accessory Dwelling Unit that is separate from the main entrance to the proposed or existing single-family structure; and

(g) includes an efficiency kitchen that meets the requirements of California Government Code Section 66333(f), including a cooking facility with appliances, and a food preparation counter and storage cabinets that are of reasonable size in relation to the size of the Junior Accessory Dwelling Unit.

(Added by Ord. 53-23; amended by Ord. 62-24; Ord. 297-24; see Sec. 102 history note.)

E

Eating and Drinking Use. A grouping of Retail Sales and Service Uses that provide food and/or beverages for either on- or off-site food consumption including Bars, Restaurants, and Limited-Restaurants. Eating and Drinking Uses are subject to the conditions in Section 202.2(a).

(Amended by Ord. 129-17; see Sec. 102 history note.)

Electric Vehicle Charging Location. Automotive Use, Retail that provides electricity to electric motor vehicles through more than one Electric Vehicle Charging Stations on a retail basis to the general public as a primary use. Electric Vehicle Charging Locations may include ancillary services, including but not limited to restrooms, self-service vending, and limited retail amenities primarily for the benefit of customers charging their vehicles.

(Added by Ord. 190-22; see Sec. 102 history note.)

Electric Vehicle Charging Station. An electric vehicle charging space served by an electric vehicle charger or other charging equipment.

(Added by Ord. 190-22; see Sec. 102 history note.)

Entertainment. See also Entertainment, Arts and Recreation Use, General Entertainment, Limited Live Performance, Nighttime Entertainment, and Outdoor Entertainment.

Entertainment, General. A Retail Entertainment, Arts and Recreation Use that provides entertainment or leisure pursuits to the general public including dramatic and musical performances where alcohol is not served during performances, arcades that provide eleven or more amusement game devices (such as video games, pinball machines, or other such similar mechanical and electronic amusement devices), billiard halls, bowling alleys, skating rinks, and mini-golf, when conducted within a completely enclosed building, and which is adequately soundproofed or insulated so as to confine incidental noise to the premises. Mechanical amusement devices are further regulated in Sections 1036 through 1036.24 of the Police Code. The use may include a non-profit theater with ABC license Type 64 and a music entertainment facility with ABC license Type 90, provided that alcohol is not served during performances.

(Amended by Ord. 129-17; Ord. 205-19; Ord. 249-23; see Sec. 102 history note.)

Entertainment, Nighttime. A Retail Entertainment, Arts and Recreation Use that includes dance halls, discotheques, nightclubs, private clubs, and other similar evening-oriented entertainment activities which require dance hall keeper police permits or Place of Entertainment police permits, as defined in Section 1060 of the Police Code, which are not limited to non-amplified live entertainment, including Restaurants and Bars which present such activities. Nighttime Entertainment uses do not include any Arts Activity, any theater performance space which does not serve alcoholic beverages during performances, or any temporary uses permitted pursuant to Sections 205 through 205.5 of this Code. This use is also subject to the controls in Section 202.11. Nighttime Entertainment uses are subject to the Entertainment Commission's Good Neighbor Policy. The use may include a non-profit theater with ABC license Type 64 and a music entertainment facility with ABC license Type 90.

(Amended by Ord. 111-21; Ord. 70-23; Ord. 249-23; see Sec. 102 history note.)

Entertainment, Outdoor. A Retail Entertainment, Arts and Recreation Use that includes circuses, carnivals, or other amusement enterprises not conducted within a building, and conducted on premises not less than 200 feet from any R District.

Entertainment, Arts and Recreation Use. A Use Category that includes Arts Activities, General Entertainment, Livery Stables, Movie Theater, Nighttime Entertainment, Open Recreation Area, Outdoor Entertainment, Passive Outdoor Recreation and Sports Stadiums. Adult Business is not included in this definition, except for the purposes of Development Impact Fee Calculation as described in Article 4.

(Amended by Ord. 129-17; Ord. 205-19; see Sec. 102 history note.)

F

Façade. An entire exterior wall assembly including, but not limited to, all finishes and siding, fenestration, doors, recesses, openings, bays, parapets, sheathing, and framing.

Façade, Front. The portion of the Façade fronting a right-of-way, or the portion of the Façade most closely complying with that definition, as in the case of a flag lot. Where a lot has more than one frontage on rights-of-way. all such frontages shall be considered Front Façades except where a façade meets the definition of "Rear Façade."

Façades, Principal. Exterior walls of a Building that are adjacent to or front on a public street, park, or plaza.

Façade, Rear. That portion of the Façade facing the part of a lot that most closely complies with the applicable Planning Code rear yard requirements.

Fair Return on Investment. Where the property owner does not own the business, the before income tax total annual rent and other compensation received from the business for the lease of the land and buildings, less the expenses of the lessor, on a cash basis. Where the property owner also owns the business, the before income tax profit on the sale of all goods and services at the business on a cash basis; for an Automotive Service Station business, it shall include the sale of gasoline, less the cost of goods sold and operating costs.

Family. A single and separate living unit, consisting of either one person, or two or more persons related by blood, marriage or adoption or by legal guardianship pursuant to court order, plus necessary domestic servants and not more than three roomers or boarders; a group of not more than five persons unrelated by blood, marriage or adoption, or such legal guardianship unless the group has the attributes of a family in that it (a) has control over its membership and composition; (b) purchases its food and prepares and consumes its meals collectively; and (c) determines its own rules or organization and utilization of the residential space it occupies. A group occupying group housing or a hotel, motel, or any other building or portion thereof other than a Dwelling, shall not be deemed to be a family.

(Amended by Ord. 63-20; see Sec. 102 history note.)

Fleet Charging. Automotive Use, Non-Retail that provides electricity to electric motor vehicles through one or more Electric Vehicle Charging Stations that are dedicated or reserved for private parties pursuant to contract or other agreement and are not available to the general public. Fleet Charging is not allowed as an accessory use to any other principal use. Parcel Delivery Service activity, including unloading, sorting, and/or reloading merchandise for deliveries, is prohibited as part of a Fleet Charging use.

(Added by Ord. 190-22; amended by Ord. 2-24; see Sec. 102 history note.)

Flexible Retail. A Retail Sales and Service Use subject to the requirements of Section 202.9, that combines a minimum of two of the following distinct Uses within a space that may be operated by one or more business operators:

(1) Arts Activities;

(2) Restaurant, Limited;

(3) Retail Sales and Services, General;

(4) Service, Personal;

(5) Service, Retail Professional; and

(6) Trade Shop.

(Added by Ord. 285-18; amended by Ord. 111-21; Ord. 249-23; see Sec. 102 history note.)

Flexible Workspace. A Retail Sales and Service use that is a combination of any uses within the Retail Sales and Service use category or a General Entertainment use that operates in conjunction with a principally or conditionally permitted Non-Retail Sales and Service use other than a Commercial Storage, Wholesale Sales, or Wholesale Storage use. The Retail Sales and Service or General Entertainment portion of the use shall be at least one-third of the overall Gross Floor Area and must face the street.

(Added by Ord. 122-23; Ord. 159-23; see Sec. 102 history note.)

Floor Area, Gross. In Districts other than C-3, the Central SoMa Special Use District and the Van Ness Special Use District, the sum of the gross areas of the several floors of a building or buildings, measured from the exterior faces of exterior walls or from the centerlines of walls separating two buildings. Where columns are outside and separated from an exterior wall (curtain wall) that encloses the building space or are otherwise so arranged that the curtain wall is clearly separate from the structural members, the exterior face of the curtain wall shall be the line of measurement, and the area of the columns themselves at each floor shall also be counted.

In the C-3 and Central SoMa and Van Ness Special Use Districts, the sum of the gross areas of the several floors of a building or buildings, measured along the glass line at windows at a height of four feet above the finished floor and along a projected straight line parallel to the overall building wall plane connecting the ends of individual windows, provided, however, that such line shall not be inward of the interior face of the wall.

(a) Except as specifically excluded in this definition, "Gross Floor Area" shall include, but not be limited to, the following:

(1) Basement and cellar space, including tenants' storage areas and all other spaces except that used only for storage or services necessary to the operation or maintenance of the building itself;

(2) Elevator shafts, stairwells, exit enclosures, and smoke-proof enclosures at each floor;

(3) Floor space in penthouses except as specifically excluded in this definition;

(4) Attic space (whether or not a floor has been laid) capable of being made into habitable space;

(5) Floor space in balconies or mezzanines in the interior of the building;

(6) Floor space in open or roofed porches, arcades, or exterior balconies, if such porch, arcade, or balcony is located above the ground floor or first floor of occupancy above basement or garage and is used as the primary access to the interior space it serves;

(7) In districts other than the C-3 and Central SoMa Special Use District, floor space in accessory buildings; and

(8) In the C-3 and Central SoMa Special Use Districts, any floor area dedicated to accessory or non-accessory parking, except for bicycle parking, required off-street loading, and accessory parking as specified in subsection (b)(7); and

(9) Any other floor space not specifically excluded in this definition.

(b) "Gross Floor Area" shall not include the following:

(1) Basement and cellar space used only for storage or services necessary to the operation or maintenance of the building itself;

(2) Attic space not capable of being made into habitable space;

(3) Elevator or stair penthouses, accessory water tanks or cooling towers, and other mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself, if located at the top of the building or separated therefrom only by other space not included in the gross floor area;

(4) Mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself (A) if located at an intermediate story of the building and forming a complete floor level; or (B) in the C-3 and Central SoMa Special Use Districts, if located on a number of intermediate stories occupying less than a full floor level, provided that the mechanical equipment,

appurtenances, and areas are permanently separated from occupied floor areas and in aggregate area do not exceed the area of an average floor as determined by the Zoning Administrator;

(5) Outside stairs to the first floor of occupancy at the face of the building which the stairs serve, or fire escapes;

(6) Floor space dedicated to accessory parking that does not exceed the amount principally permitted as accessory, and is located on any Basement Story;

(7) In C-3 and CMUO Districts, floor space dedicated to parking which does not exceed the amount principally permitted as accessory, and is located underground;

(8) Bicycle parking that meets the standards of Sections 155.1 through 155.4 of this Code;

(9) Arcades, plazas, walkways, porches, breezeways, porticos and similar features (whether roofed or not), at or near street level, accessible to the general public and not substantially enclosed by exterior walls; and accessways to public transit lines, if open for use by the general public; all exclusive of areas devoted to sales, service, display, and other activities other than movement of persons;

(10) Balconies, porches, roof decks, terraces, courts and similar features, except those used for primary access as described in Paragraph (a)(6) above, provided that:

(A) If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the clear space is less than 15 feet in either dimension, the area shall not be excluded from Gross Floor Area unless it is fully open to the sky (except for roof eaves, cornices, or belt courses that project not more than two feet from the face of the building wall).

(B) If more than 70 percent of the perimeter of such an area is enclosed, either by building walls (exclusive of a railing or parapet not more than three feet eight inches high), or by such walls and interior lot lines, and the clear space is 15 feet or more in both dimensions: (i) The area shall be excluded from Gross Floor Area if it is fully open to the sky (except for roof eaves, cornices, or belt courses that project no more than two feet from the face of the building wall); and (ii) The area may have roofed areas along its perimeter which are also excluded from Gross Floor Area if the minimum clear open space between any such roof and the opposite wall or roof (whichever is closer) is maintained at 15 feet (with the above exceptions) and the roofed area does not exceed 10 feet in depth; (iii) In addition, when the clear open area exceeds 625 square feet, a canopy, gazebo, or similar roofed structure without walls may cover up to 10 percent of such open space without being counted as gross floor area.

(C) If, however, 70 percent or less of the perimeter of such an area is enclosed by building walls (exclusive of a railing or parapet not more than three feet eight inches high) or by such walls and interior lot lines, and the open side or sides face on a yard, street or court whose dimensions satisfy the requirements of this Code and all other applicable codes for instances in which required windows face upon such yard, street, or court, the area may be roofed to the extent permitted by such codes in instances in which required windows are involved;

(11) On lower, nonresidential floors, elevator shafts and other life-support systems serving exclusively the residential uses on the upper floors of a building;

(12) One-third of that portion of a window bay conforming to the requirements of Section 136(d)(2) that extends beyond the plane formed by the face of the façade on either side of the bay, but not to exceed seven square feet per bay window as measured at each floor;

(13) Ground floor area in the C-3-O, C-3-O(SD), C-3-S, C-3-S(SU), and C-3-G Districts, and in the Central SoMa Special Use District devoted to building or pedestrian circulation and building service;

(14) In the C-3-O, C-3-O(SD), C-3-S, C-3-S(SU), and C-3-G Districts, space devoted to personal services, restaurants, and retail sales of goods intended to meet the convenience shopping and service needs of downtown workers and residents, not to exceed 5,000 occupied square feet per use and, in total, not to exceed 75 percent of the area of the ground floor of the building plus the ground level, on-site open space. Said uses shall be located on the ground floor except that, in order to facilitate the creation of more spacious ground floor interior spaces, a portion of the said uses, in an amount to be determined pursuant to the provisions of Section 309, may be located on a mezzanine level;

(15) An interior space provided as an open space feature in accordance with the requirements of Section 138;

(16) Floor area in C-3 and Eastern Neighborhoods Mixed Use Districts devoted to child care facilities, provided that:

(A) Allowable indoor space is no less than 3,000 square feet and no more than 6,000 square feet;

(B) The facilities are made available rent free;

(C) Adequate outdoor space is provided adjacent, or easily accessible, to the facility. Spaces such as atriums, rooftops, or public parks may be used if they meet licensing requirements for child care facilities; and

(D) The space is used for child care for the life of the building as long as there is a demonstrated need. No change in use shall occur without a finding by the Planning Commission that there is a lack of need for child care and that the space will be used for a facility described in subsection (B)(17) below dealing with cultural, educational, recreational, religious, or social service facilities;

(17) Floor area in C-3 and Eastern Neighborhoods Mixed Use Districts permanently devoted to cultural, educational, recreational, religious, or social service facilities available to the general public at no cost or at a fee covering actual operating expenses, provided that such facilities are:

(A) Owned and operated by a nonprofit corporation or institution; or

(B) Are made available rent free for occupancy only by nonprofit corporations or institutions for such functions. Building area subject to this subsection shall be counted as Occupied Floor Area, except as provided in subsections (a) through (f) in the definition for Floor Area, Occupied, for the purpose of calculating the freight loading requirements for the project;

(18) In the C-3-O(SD) District, space devoted to personal services, eating and drinking uses, or retail sales of goods and that is located on the same level as the rooftop park on the Transbay Transit Center and directly accessible thereto by a direct publicly-accessible pedestrian connection meeting the standards of Section 138(j)(1); and

(19) In the C-3-O(SD) District, publicly-accessible space on any story above a height of 600 feet devoted to public accommodation that offers extensive views, including observation decks, sky lobbies, restaurants, bars, or other retail uses, as well as any elevators or other vertical circulation dedicated exclusively to accessing or servicing such space. The space must be open to the general public during normal business hours throughout the year, and may charge a nominal fee for access.

(20) [Expired]

(21) Any area devoted to bicycle parking, bicycle maintenance rooms, or car share spaces when such features are provided as part of a Development Project's compliance with the Transportation Demand Management Program set forth in Section 169 of the Planning Code.

(Amended by Ord. 52-15; Ord. 34-17; Ord. 13-18; Ord. 296-18; see Sec. 102 history note.)

Floor Area, Occupied. Floor area devoted to, or capable of being devoted to, a principal or Conditional Use and its accessory uses. For purposes of computation, "Occupied Floor Area" shall consist of the Gross Floor Area, as defined in this Code, minus the following:

(a) Accessory parking and loading spaces and driveways, and maneuvering areas incidental thereto;

(b) Exterior walls of the building;

(c) Mechanical equipment, appurtenances, and areas necessary to the operation or maintenance of the building itself, wherever located in the building;

(d) Restrooms and space for storage and services necessary to the operation and maintenance of the building itself, wherever located in the building;

(e) Space in a retail store for store management, show windows, and dressing rooms, and for incidental repairs, processing, packaging, and stockroom storage of merchandise for sale on the premises; and

(f) Incidental storage space for the convenience of tenants.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Floor Area Ratio. The ratio of the Gross Floor Area of all the buildings on a lot to the area of the lot. In cases in which portions of the gross floor area of a building project horizontally beyond the lot lines, all such projecting gross floor area shall also be included in determining the floor area ratio.

Floor Area, Usable. Generally, the sum of the gross areas of the several floors of a building, measured from the exterior walls or from the center lines of common walls separating two buildings. See alternative definition for the Bernal Heights Special Use District.

Formula Retail. Formula Retail shall have the meaning set forth in Section 303.1 of the Planning Code.

G

Gas Station. A Retail Automotive Use that provides motor fuels, lubricating oils, air, and water directly into motor vehicles and without providing Automotive Repair services, and which also includes self-service operations that sell motor fuel only. This use is subject to the controls in Sections 202.2(b) and 187.1.

(Amended by Ord. 188-15; see Sec. 102 history note.)

General Entertainment. See Entertainment, General.

General Grocery. See Grocery, General.

Gift Store-Tourist Oriented. A Retail Sales and Service Use that involves the marketing of small art goods, gifts, souvenirs, curios, or novelties to the public, particularly those who are visitors to San Francisco rather than local residents.

Grain Elevator. An Industrial Use defined as a storage facility for grain that contains a bucket elevator or a pneumatic conveyor that scoops up grain from a lower level and deposits it in a silo or other storage facility. This use also covers the entire elevator complex including, but not limited to, receiving and testing offices, weighbridges, and storage facilities.

Grocery, General. A Retail Sales and Services Use that:

(a) Offers a diverse variety of unrelated, non-complementary food and non-food commodities, such as beverages, dairy, dry goods, fresh produce and other perishable items, frozen foods, household products, and paper goods;

(b) May provide beer, wine, and/or liquor sales for consumption off the premises with a California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine) or type 21 (off-sale general) that occupy less than 15% of the Occupied Floor Area of the establishment (including all areas devoted to the display and sale of alcoholic beverages);

(c) May prepare minor amounts of food on site for immediate consumption;

(d) Markets the majority of its merchandise at retail prices; and

(e) Shall operate with the specified conditions in Section 202.2(a)(1).

(f) Such businesses require Conditional Use authorization for conversion of a General Grocery use greater than 5,000 square feet, pursuant to Section 202.3 and 303(l).

(Amended by Ord. 188-15; Ord. 129-17; see Sec. 102 history note.)

Grocery, Specialty. A Retail Sales and Services Use that:

(a) Offers specialty food products such as baked goods, pasta, cheese, confections, coffee, meat, seafood, produce, artisanal goods, and other specialty food products, and may also offer additional food and non-food commodities related or complementary to the specialty food products;

(b) May provide beer, wine, and/or liquor sales for consumption off the premises with a California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine) or type 21 (off-sale general) which occupy less than 15% of the Occupied Floor Area of the establishment (including all areas devoted to the display and sale of alcoholic beverages);

(c) May prepare minor amounts of food on site for immediate consumption off-site with no seating permitted; and

(d) Markets the majority of its merchandise at retail prices.

(e) Such businesses that provide food or drink per subsections (b) and (c) above shall operate with the specified conditions in Section 202.2(a)(1).

(Amended by Ord. 188-15; Ord. 129-17; see Sec. 102 history note.)

Gross Floor Area. See Floor Area, Gross

Ground Floor. First Story, as defined under Story, below.

(Added by Ord. 206-19; see Sec. 102 history note.)

Group Housing. A Residential Use that provides lodging or both meals and lodging, without individual or limited cooking facilities or kitchens, by prearrangement for 30 days or more at a time and intended as Long-Term Housing, in a space not defined by this Code as a Dwelling Unit. Except for Group Housing that also qualifies as Student Housing as defined in this Section 102, 100% Affordable Housing as defined in Planning Code Section 315, or housing operated by an organization with tax-exempt status under 26 United States Code Section 501(c)(3) providing access to the unit in furtherance of it^{3} primary mission to provide housing, the residential square footage devoted to Group Housing shall include both common and private space in the following amounts: for every gross square foot of private space (including bedrooms and individual bathrooms), 0.5 gross square feet of common space shall be provided, with at least 15% of the common space devoted to communal kitchens with a minimum of one kitchen for every 15 Group Housing units. Group Housing shall include, but not necessarily be limited to, a Residential Hotel, boardinghouse, guesthouse, rooming house, lodging house, residence club, commune, fraternity or sorority house, monastery, nunnery, convent, or ashram. It shall also include group housing affiliated with and operated by a medical or educational institution, when not located on the same lot as such institution, which shall meet the applicable provisions of Section 304.5 of this Code concerning institutional master plans.

(Amended by Ord. 50-22; see Sec. 102 history note.)

Gym. A Retail Sales and Service Use including a health club, fitness, gymnasium, or exercise facility when including equipment and space for weight-lifting and cardiovascular activities.

(Amended by Ord. 111-21; see Sec. 102 history note.)

H

Hazardous Waste Facility. An Industrial Use that includes any use involving the treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous waste that is produced at an off-site facility, but shall not include a facility that: (1) manages only used oil, used oil filters, latex paint, antifreeze, small household batteries or lead acid batteries; or (2) establishes that it is not required to obtain a hazardous waste facility permit from the State of California. The terms "hazardous waste," "treatment," "transfer," "storage," "disposal," "off-site facility," and "used oil" as used herein shall have the meaning given those terms in the California Health and Safety Code, Division 20, Chapter 6.5, Articles 2 and 13, which are hereby incorporated by reference.

Health Service. See Service, Health.

Heavy Manufacturing. See Manufacturing, Heavy.

Height (of a building or structure). The vertical distance by which a building or structure rises above a certain point of measurement. See Section 260 of this Code for how height is measured.

Historic Building. A Historic Building is a building or structure that meets at least one of the following criteria:

- It is individually designated as a landmark under Article 10;
- It is listed as a contributor to an historic district listed in Article 10, or if the historic district does not list contributors, is determined to be a contributor through historic resource review;
- It is a Significant or Contributory Building under Article 11, with a Category I, II, III or IV rating;

- It has been listed or has been determined eligible for listing in the California Register of Historical Resources; or,
- It has been listed or has been determined eligible for listing in the National Register of Historic Places.

(Added by Ord. 248-23; amended by Ord. 297-24; see Sec. 102 history note.)

Homeless Shelter. A Residential Use defined as living and/or sleeping accommodations without any fee to individuals and families who are homeless, as defined in the Federal Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act of 2009 (S.896), as amended from time to time. Homeless Shelters shall comply with the requirements of the Standards of Care for City Shelters contained in Administrative Code, Chapter 20, Article XIII, including the requirement for operational standards in Section 20.404(d).

Horizontal Elements. All roof areas and all floor plates, except floor plates at or below grade.

Hospital. An Institutional Healthcare Use that includes a hospital, medical center, or other medical institution that provides facilities for inpatient or outpatient medical care and may also include medical offices, clinics, laboratories, and employee or student dormitories and other housing, operated by and affiliated with the institution, which institution has met the applicable provisions of Section 304.5 of this Code concerning Institutional Master Plans.

(Amended by Ord. 188-15; see Sec. 102 history note.)

Hotel. A Retail Sales and Services Use that provides tourist accommodations, including guest rooms or suites, which are intended or designed to be used, rented, or hired out to guests (transient visitors) intending to occupy the room for less than 32 consecutive days. This definition also applies to buildings containing six or more guest rooms designated and certified as tourist units, under Chapter 41 of the San Francisco Administrative Code. For purposes of this Code, a Hotel does not include (except within the Bayshore-Hester Special Use District as provided for in Sections 713 and 780.2 of this Code) a Motel, which contains guest rooms or suites that are independently accessible from the outside, with garage or parking space located on the lot, and designed for, or occupied by, automobile-traveling transient visitors. Hotels shall be designed to include all lobbies, offices, and internal circulation to guest rooms and suites within and integral to the same enclosed building or buildings as the guest rooms or suites.

Hotel, Residential. A Residential Use defined in Chapter 41 of the San Francisco Administrative Code that contains one or more residential hotel units. A residential hotel unit is a guest room, as defined in Section 203.7 of Chapter XII, Part II, of the San Francisco Municipal Code (Housing Code), which had been occupied by a permanent resident on September 23, 1979, or any guest room designated as a residential unit pursuant to Sections 41.6 or 41.7 of Chapter 41 of the San Francisco Administrative Code. Residential hotels are further defined and regulated in the Residential Hotel Unit Conversion and Demolition Ordinance, Chapter 41, of the San Francisco Administrative Code.

Hours of Operation. A commercial Use Characteristic limiting the permitted hours during which any commercial establishment, not including automated teller machines, may be open for business. Other restrictions on the hours of operation of Movie Theaters, Adult Businesses, Adult Sex Venues, Nighttime Entertainment, and General Entertainment Uses shall apply pursuant to provisions in Section 303(p), when such uses are permitted as Conditional Uses. A Pharmacy may qualify for the exception to operate on a 24-hour basis provided in Section 202.2(a)(2) of the Code. The hours of operation of a principally permitted Adult Sex Venue are subject to the provisions in Section 202.2(a)(8).

(Amended by Ord. 129-17; Ord. 202-18; Ord. 75-22; Ord. 70-23; see Sec. 102 history note.)

I

Industrial Use. A Use Category containing the following uses: Agricultural and Beverage Processing 1 and 2, Automobile Wrecking, Automobile Assembly, Grain Elevator, Hazardous Waste Facility, Junkyard, Livestock Processing 1 and 2, Heavy Manufacturing 1, 2, and 3, Light Manufacturing, Metal Working, Ship Yard, Storage Yard, Volatile Materials Storage, and Truck Terminal.

(Amended by Ord. 229-17; Ord. 202-18; see Sec. 102 history note.)

Infrastructure. Open space and recreational facilities; public realms improvements such as pedestrian improvements and streetscape improvements; public transit facilities; and community facilities such as libraries, child care facilities, and community centers.

In-Kind Agreement. An agreement acceptable in form and substance to the City Attorney and the Director of Planning, under which the project sponsor agrees to provide a specific set of community improvements, at a specific phase of construction, in lieu of contribution to the relevant Fund.

In Lieu Fee. A fee paid by a project sponsor in lieu of complying with a requirement of this Code and that is not a development impact fee governed by the Mitigation Fee Act.

Institutional Community Use. A subcategory of Institutional Uses that includes Child Care Facility, Community Facility, Private Community Facility, Job Training, Religious Institution, Social Service or Philanthropic Facility, and Public Facility.

(Amended by Ord. 182-19, see Sec. 102 history note.)

Institutional Education Use. A subcategory of Institutional Uses that includes Post-Secondary Educational Institution, School, and Trade School.

Institutional Healthcare Use. A subcategory of Institutional Uses that includes Hospital, Medical Cannabis Dispensary, and Residential Care Facility.

Institutional Use. A Use Category that includes Child Care Facility, Community Facility, Private Community Facility, Hospital, Job Training, Medical Cannabis Dispensary, Religious Institution, Residential Care Facility, Social Service or Philanthropic Facility, Post-Secondary Educational Institution, Public Facility, School, and Trade School.

(Amended by Ord. 63-20; see Sec. 102 history note.)

Interior Lot. See Lot, Interior.

Intermediate Length Occupancy. A Residential Use characteristic that applies to a Dwelling Unit offered for occupancy by a natural person for an initial stay, whether through lease, subscription, license, or otherwise, for a duration of greater than 30 consecutive days but less than one year. This use characteristic is subject to the requirements of Section 202.10.

(Added by Ord. 78-20; see Sec. 102 history note.)

Internet Service Exchange. A Utility and Infrastructure Use defined as a location that contains any of the following uses (excluding a Wireless Telecommunications Services Facility): switching equipment (whether wireline or wireless) that joins or connects occupants, customers, or subscribers to enable customers or subscribers to transmit data, voice or video signals to each other; one or more computer systems and related equipment used to build, maintain, or process data, voice or video signals, and provide other data processing services; or a group of network servers.

(Amended by Ord. 166-16; see Sec. 102 history note.)

J

Jewelry Store. A Retail Sales and Service Use that primarily involves the sale of jewelry to the general public. It may involve sales of precious stones, gems, precious metals, gold and silver, or clocks and watches. Repair services or setting, custom design or manufacture of individual pieces of jewelry may also be provided.

Job Training. A Institutional Community Use that provides job training and may also provide vocational counseling and job referrals.

Junk Yard. An Industrial Use defined as an outdoor space where junk, waste, discarded or salvaged materials are stored or handled, including house-wrecking yards, used lumber yards, and places or yards for storage of salvaged house wrecking and structural steel materials and equipment, excluding automobile wrecking operations, which is defined as a separate use in this Section of the Code; yards or establishments for the sale, purchase, or storage of used cars or machinery in operable condition; and the processing of used, discarded, or salvaged materials as part of a permitted manufacturing operation in the same premises.

K

Kennel. A Retail Sales and Services Use where dogs, or dogs and cats, are boarded for compensation, or are cared for or trained for hire, or are kept for sale or bred for sale, where the care, breeding, or sale of the dogs, or dogs and cats, is the principal means of livelihood of the occupants of the premises.

(Amended by Ord. 111-21; see Sec. 102 history note.)

L

Laboratory. A Non-Retail Sales and Services Use intended or primarily suitable for scientific research. The space requirements of uses within this category include specialized facilities and/or built accommodations that distinguish the space from Office uses, Light Manufacturing, or Heavy Manufacturing. Examples of laboratories include the following:

(a) Chemistry, biochemistry, or analytical laboratory;

(b) Engineering laboratory;

(c) Development laboratory;

(d) Biological laboratories including those classified by the Centers for Disease Control (CDC) and National Institutes of Health (NIH) as Biosafety level 1, Biosafety level 2, or Biosafety level 3;

(e) Animal facility or vivarium, including laboratories classified by the CDC/NIH as Animal Biosafety level 1, Animal Biosafety level 2, or Animal Biosafety level 3;

(f) Support laboratory;

(g) Quality assurance/Quality control laboratory;

(h) Core laboratory; and

(i) Cannabis testing facility (any use requiring License Type 8—Testing Laboratory, as defined in California Business and Professions Code, Division 10).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Large-Scale Urban Agriculture. See Agriculture, Large Scale Urban.

Laundromat. A Retail Sales and Service Use that is used for the purpose of washing, drying, dry cleaning, starching, or ironing, for the general public, wearing apparel, household linens, or other washable fabrics, or a place used or maintained for the storage, collection, or delivery of such articles for such service. A Laundromat use shall include any place, whether self-service or otherwise, maintained for the general public for the purpose of washing and drying wearing apparel, household linens, or other washable fabrics, by coin-operated, or card-operated laundry machinery.

(Amended by Ord. 209-21; see Sec. 102 history note.)

Length (of a Building or Structure). See Plan Dimensions.

(Added by Ord. 206-19; see Sec. 102 history note.)

Licensed Child Care Facility. A child care facility that has been issued a valid license by the California Department of Social Services pursuant to California Health and Safety Code Sections 1596.80-1596.875, 1596.95-1597.09, or 1597.30-1597.61.

Life Science. A Non-Retail Sales and Service Use that involves the integration of natural and engineering sciences and advanced biological techniques using organisms, cells, and parts thereof for products and services. This includes the creation of products and services used to analyze and detect various illnesses, the design of products that cure illnesses, and/or the provision of capital goods and services, machinery, instruments, software, and reagents related to research and production. Life Science uses may utilize office, laboratory, light manufacturing, or other types of space. As a subset of Life Science uses, Life Science laboratories typically include biological laboratories and animal facilities or vivaria, as described in the Laboratory definition Subsections (d) and (e).

Light Manufacturing. See Manufacturing, Light.

Limited Live Performance. An Accessory Use as defined in Section 1060 of the Police Code

Limited Restaurant. See Restaurant, Limited.

Liquor Store. A Retail Sales and Service Use that sells beer, wine, or distilled spirits to a customer in an open or closed container for consumption off the premises and that needs a State of California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine) or type 21 (off-sale general) This classification shall not include retail uses that:

(a) are both (1) classified as a General Grocery, a Specialty Grocery, or a Restaurant- Limited, and (2) have a Gross Floor Area devoted to alcoholic beverages that is within the applicable accessory use limits for the use district in which it is located, or

(b) have both (1) a Non-residential Use Size of greater than 10,000 gross square feet and (2) a gross floor area devoted to alcoholic beverages that is within accessory use limits as set forth in Section 204.3 or Section 703(d) of this Code, depending on the zoning district in which the use is located.

(c) For purposes of Planning Code Sections 249.5, 781.8, 781.9, 782, and 784, the retail uses explicitly exempted from this definition as set forth above shall only apply to General Grocery and Specialty Grocery stores that exceed 5,000 square feet in size and shall not:

(1) sell any malt beverage with an alcohol content greater than 5.7 percent by volume; any wine with an alcohol content of greater than 15 percent by volume, except for “dinner wines” that have been aged two years or more and maintained in a corked bottle; or any distilled spirits in container sizes smaller than 600 milliliters;

(2) devote more than 15 percent of the gross square footage of the establishment to the display and sale of alcoholic beverages; and

(3) sell single servings of beer in container sizes 24 ounces or smaller.

Liquor Store uses are subject to the operating conditions of Section 202.2(a)(6). Where conditionally permitted, the Conditional Use authorization shall also satisfy the conditions of Section 303(z).

(Amended by Ord. 129-17; Ord. 182-19; see Sec. 102 history note.)

Livery Stable. A Retail Entertainment, Arts and Recreation Use where horses and carriages are kept for hire and where stabling is provided. This use also includes horse riding academies.

Livestock Processing 1. An Industrial Use that involves the live storage, killing or dressing of poultry, rabbits or other small livestock, and/or the tanning or curing of raw hides or skins from an animal of any size. Direct sales to customers is permitted on site. This use is subject to the location and operating restrictions in Section 202.2(d).

Livestock Processing 2. An Industrial Use that involves the live storage, killing or dressing of cows, pigs, goats, and other large livestock and/or the tanning or curing of raw hides or skins from an animal of any size. Direct sales to customers is permitted on site. This use is subject to the location and operating restrictions in Section 202.2(d).

Live/Work Project. A Housing Project containing more than one Live/Work Unit.

Live/Work Unit. A hybrid Residential and PDR Use that is defined as a structure or portion of a structure combining a residential living space for a group of persons including not more than four adults in the same unit with an integrated work space principally used by one or more of the residents of that unit; provided, however, that no otherwise qualifying portion of a structure that contains a Group A occupancy under the Building Code shall be considered a Live/Work Unit. No City official, department, board, or commission shall issue or approve a building permit or other land use entitlement authorizing a new live/work unit as defined here, except as authorized under Section 210.5, or as an accessory use under Section 204.4. Lawfully approved live/work units are subject to the provisions of Sections 181 and 317 of this Code.

(Amended by Ord. 122-23; Ord. 159-23; see Sec. 102 history note.)

Long Term Housing. Housing intended for occupancy by a person or persons for 32 consecutive days or longer.

Lot. A parcel of land under one ownership that constitutes, or is to constitute, a complete and separate functional unit of development, and that does not extend beyond the property lines along streets or alleys. A lot as so defined generally consists of a single Assessor's lot, but in some cases consists of a combination of contiguous Assessor's lots or portions thereof where such combination is necessary to meet the requirements of this Code. In order to clarify the status of specific property as a lot under this Code, the Zoning Administrator may, consistent with the provisions of this Code, require such changes in the Assessor's records, placing of restrictions on the land records, and other actions as may be necessary to assure compliance with this Code. The definition of "lot" shall also be applicable to piers under the jurisdiction of the Port Commission.

Lot, Corner. A lot bounded on two or more adjoining sides by streets that intersect adjacent to such lot, provided that the angle of intersection of such streets along such lot does not exceed 135 degrees. For the purposes of this Code, no Corner Lot shall be considered wider or deeper than 125 feet, and the remainder of any lot involved shall be considered to be an Interior Lot. Whenever a Corner Lot is resubdivided, only that portion which thereafter is bounded on adjoining sides by streets as herein described shall be a Corner Lot.

Lot, Interior. A lot other than a Corner Lot.

Lot Size (Per Development). The permitted gross lot area for new construction or expansion of existing development.

M

Mandatory Discretionary Review. A hearing before the Planning Commission that is required by the Planning Code at which the Commission will determine whether to approve, modify, or disapprove a permit application.

Manufacturing 1, Heavy. An Industrial Use having the potential of creating substantial noise, smoke, dust, vibration, and/or other environmental impacts or pollution, and including, but not limited to:

(a) Concrete mixing, concrete products manufacture,

(b) Electric foundry or foundry for nonferrous metals

(c) Enameling, lacquering, wholesale paint mixing from previously prepared pigments and vehicles,

(d) Woodworking mill, manufacture of woodfibre, sawdust or excelsior products not involving chemical processing,

(e) Blast furnace, rolling mill, or smelter; and

(f) Ice manufacturing plant.

This use is subject to the location and operation controls in Section 202.2(d)

Manufacturing 2, Heavy. An Industrial Use having the potential of creating substantial noise, smoke, dust, vibration, and/or other environmental impacts or pollution, and including, but not limited to:

(a) Production or refining of petroleum products, excluding such products used solely as fuel sources;

(b) Rendering or reduction of fat, bones, or other animal material, where adequate provision is made for the control of odors through the use of surface condensers and direct-flame afterburners or equivalent equipment;

(c) Incineration of garbage, refuse, dead animals or parts thereof;

This use is subject to the controls in Section 202.2(d).

(Amended by Ord. 217-21; see Sec. 102 history note.)

Manufacturing 3, Heavy. An Industrial Use having the potential of creating substantial noise, smoke, dust, vibration, and/or other environmental impacts or pollution, and including, but not limited to:

(a) Battery manufacture;

(b) Manufacture of corrosive acid or alkali, cement, gypsum, lime, plaster of Paris, explosive, fertilizer, glue or gelatin from fish or animal refuse;

(c) Manufacture, refining, distillation, or treatment of any of the following: abrasives, acid (noncorrosive), alcohol, ammonia, asbestos, asphalt, bleaching powder, candles (from tallow), celluloid, chlorine, coal, coke, creosote, dextrine, disinfectant, dye, enamel, gas carbon or lampblack, gas (acetylene or other inflammable), glucose, insecticide, lacquer, linoleum, matches, oilcloth, oil paint, paper (or pulp), petroleum products (excluding such products used solely as fuel sources), perfume, plastics, poison, potash, printing ink, refuse mash or refuse grain, rubber (including balata or gutta-percha or crude or scrap rubber), shellac, shoe or stove polish, soap, starch, tar, turpentine, or varnish.

(d) Foundry, structural iron or pipe works, boilermaking where riveting is involved, locomotive works, roundhouse or railroad shop.

This use is subject to the location and operation controls in Section 202.2(d)

(Amended by Ord. 217-21; see Sec. 102 history note.)

Manufacturing, Light. An Industrial Use that provides for the fabrication or production of goods, by hand or machinery, for distribution to retailers or wholesalers for resale off the premises, primarily involving the assembly, packaging, repairing, or processing of previously prepared materials. Light manufacturing uses include production and custom activities usually involving individual or special design, or handiwork, such as the following fabrication or production activities, as may be defined by the Standard Industrial Classification Code Manual as light manufacturing uses:

(a) Food processing;

(b) Apparel and other garment products;

(c) Furniture and fixtures;

(d) Printing and publishing of books or newspapers;

(e) Leather products;

(f) Pottery;

(g) Glass-blowing;

(h) Commercial laundry, rug cleaning, and dry cleaning facility;

(i) Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks; or

(j) Manufacture of cannabis products or cannabis extracts that are derived without the use of volatile organic compounds (any use requiring License Type 6—Manufacturer 1, as defined in California Business and Professions Code, Division 10).

It shall not include Trade Shop, Agricultural and Beverage Processing 1 or 2, or Heavy Manufacturing 1, 2, or 3. This use is subject to the location and operation controls in Section 202.2(d).

(Amended by Ord. 229-17; Ord. 111-21; see Sec. 102 history note.)

Maritime Use. A Use Characteristic defined as any use that requires access to or use of San Francisco Bay waters in order to function or operate in the normal course of business including, but not limited to, uses associated with waterborne commerce, navigation, fisheries, and recreation, and industrial, commercial, and other operations directly related to the conduct of waterborne commerce, navigation, fisheries, or recreation on property subject to public trust. Maritime Uses also includes houseboats or residential uses on the water.

Marquee. A permanent roofed structure attached to and supported entirely by a building, including any object or decoration attached to or part of said marquee, no part of which shall be used for occupancy or storage, with the purpose of providing protection from sun and rain and/or embellishment of the façade, as further regulated in Section 3106 of the Building Code.

Massage, Chair/Foot. A Retail Sales and Service Use where the only massage service provided is chair or foot massage, such service is visible to the public, and customers are fully clothed at all times.

Massage Establishment. A Retail Sales and Service Use defined by Section 29.5 of the Health Code. For purposes of the Planning Code only, "Massage Establishment" shall include a "Massage Establishment" but shall not include a "Sole Practitioner Massage Establishment," as these terms are defined in Section 29.5 of the Health Code. The Massage Establishment shall first obtain a permit from the Department of Public Health pursuant to Section 29.25 of the Health Code, or a letter from the Director of the Department of Public Health certifying that the establishment is exempt from such a permit under Section 29.25 of the Health Code

(Amended by Ord. 73-15; Ord. 63-20; Ord. 233-21; Ord. 37-22; see Sec. 102 history note.)

Medical Cannabis Dispensary. An Institutional Healthcare Use that is either (a) a cooperative or collective operating under the authority of a permit issued by the Director of Health under Article 33 of the Health Code, or (b) a Medicinal Cannabis Retailer as defined in Police Code Section 1602. A Medical Cannabis Dispensary Use is permitted only if it meets the conditions listed in Section 202.2(e).

(Amended by Ord. 229-17; see Sec. 102 history note.)

Metal Working. An Industrial use that includes metal working or blacksmith shop; excluding presses of over 20 tons' capacity and machine-operated drop hammers. This use is subject to location and operational controls in Section 202.2(d).

Mobile Food Facility. Any vehicle or pushcart used in conjunction with a commissary or other permanent food facility upon which food is sold or distributed at retail prices. Mobile Food Facility does not include a "Transporter" used to transport packaged food from a food facility or other approved source to the consumer. A Mobile Food Facility does not include any use that sells goods, wares, or merchandise other than food or drink intended for human consumption. For the purposes of the Planning Code, a Mobile Food Facility that is a temporary Use is regulated as an intermittent activity, per Section 205.4; a Mobile Food Facility that exceeds the limitations set forth in Section 205.4 is considered a Restaurant or Limited Restaurant Use, as defined in this Section 102, and is regulated as such by the Use controls for the respective zoning district. Mobile Food Facilities shall comply with the good neighbor policies set forth in Public Works Code Section 184.94 as well as Planning Code Section 202.2(a)(1).

(Amended by Ord. 129-17; see Sec. 102 history note.)

MOH. The Mayor's Office of Housing and Community Development or its successor.

Mortuary. A Retail Sales and Services Use that provides funeral services, funeral preparation, or burial arrangements, including retail establishments that predominantly sell or offer for sale caskets, tombstones, or other funerary goods. In RH, RM, RTO, and RC Districts only, this use includes Columbarium use, which provides for the storage of cremated remains in niches.

Motel. A Retail Sales and Services Use that includes an auto court, motor lodge, tourist court, or other facility similarly identified, contains rooms or suites of rooms, none with individual cooking facilities, which are offered for compensation and are primarily for the accommodation of transient guests traveling by automobile, and where each sleeping unit is independently accessible from the outside. This use is subject to the controls listed in Section 202.2(a).

Movie Theater. A Retail Entertainment, Arts and Recreation Use that displays motion pictures, videos, slides, or closed-circuit television pictures. This use does not include an adult theater, which is regulated as an Adult Business. Removal of a Movie Theater is subject to the controls in Section 202.4.

MTA. The Municipal Transportation Agency or its successor.

MTA Director. The Director of MTA or his or her designee.

Municipal Railway (Muni). The public transit system owned by the City and under the jurisdiction of the MTA.

N

Neighborhood Agriculture. See Agriculture, Neighborhood.

Neighborhood-Serving Business. A neighborhood-serving business cannot be defined by the type of use, but rather by the characteristics of its customers, types of merchandise or service, its size, trade area, and the number of similar establishments in other neighborhoods. The primary clientele of a "neighborhood-serving business," by definition, is comprised of customers who live and/or work nearby.

While a neighborhood-serving business may derive revenue from customers outside the immediately surrounding neighborhood, it is not dependent on out-of-neighborhood clientele.

A neighborhood-serving use provides goods and/or services which are needed by residents and workers in the immediate neighborhood to satisfy basic personal and household needs on a frequent and recurring basis, and which if not available require trips outside of the neighborhood.

A use may be more or less neighborhood-serving depending upon its trade area. Uses that, due to the nature of their products and service, tend to be more neighborhood-serving are those which sell convenience items such as groceries, personal toiletries, magazines, and personal services such as cleaners, laundromats, and film processing. Uses that tend to be less neighborhood-oriented are those which sell more specialized, more expensive, less frequently purchased comparison goods such as automobiles and furniture.

For many uses (such as stores selling apparel, household goods, and variety merchandise), whether a business is neighborhood-serving depends on the size of the establishment: the larger the use, the larger the trade area, hence the less neighborhood-oriented.

Whether a business is neighborhood-serving or not also depends in part on the number and availability of other similar establishments in other neighborhoods: the more widespread the use, the more likely that it is neighborhood-oriented.

Net Addition. The total amount of gross floor area defined in Planning Code Section 102 contained in a development project, less the gross floor area contained in any structure demolished or retained as part of the proposed development project.

Nighttime Entertainment. See Entertainment, Nighttime.

Non-Auto Vehicle Sales or Rental. A Retail Sales and Service Use offering new or used bicycles, scooters, motorcycles, boats, or other marine vehicles for sale, rent, or lease when conducted entirely within an enclosed building.

Non-Commercial Entertainment and Recreation. See Entertainment and Recreation, Non-Commercial.

Nonprofit Organization. An organization organized and operated for nonprofit purposes within the provisions of California Revenue and Taxation Code Sections 23701-23710, inclusive, as demonstrated by a written determination from the California Franchise Tax Board exempting the organization from taxes under Revenue and Taxation Code Section 23701.

Non-Residential Use. Space within any structure or portion thereof intended or primarily suitable for, or accessory to, occupancy by retail, office, commercial, or uses other than a Residential Use as defined in this Section. For the purposes of Article 4, residential components of Institutional Uses other than Religious Institutions shall be defined as a "residential use," and non-residential use shall not include PDR and publicly owned and operated community facilities.

Non-Residential Use Size. The permitted gross floor area allowed each individual non-residential use. Gross Floor Area is defined in this Section of the Code.

Non-Retail Use. A type of Commercial Use that involves the sale of goods or services to other businesses rather than the end user, or that does not provide for direct sales to the general public on site. Uses in this category include, but are not limited to, Non-Retail Sales and Service Uses and Non-Retail Automotive Uses.

Notice of Special Restrictions. A document recorded with the San Francisco Recorder’s Office detailing specific restrictions placed on an Assessor’s lot that are typically associated with an approval action by the Planning Department, Planning Commission, Zoning Administrator, or other City agency.

(Amended by Ord. 202-18; see Sec. 102 history note.)

O

Occupied Floor Area. See Floor Area, Occupied.

Office, General. A Non-Retail Sales and Service Use that includes space within a structure or portion thereof intended or primarily suitable for occupancy by persons or entities which perform, provide for their own benefit, or provide to others at that location, services including, but not limited to, the following: professional, banking, insurance, management, consulting, technical, sales, and design; and the non-accessory office functions of manufacturing and warehousing businesses, multimedia, software development, web design, electronic commerce, and information technology. This use shall exclude Non-Retail Professional Services as well as Retail Uses; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; wholesale shipping, receiving and storage; and design showrooms or any other space intended and primarily suitable for display of goods.

Office Use. A grouping of uses that includes General Office, Retail Professional Services, and Non-Retail Professional Services. This use shall exclude: retail uses other than Retail Professional Services; repair; any business characterized by the physical transfer of tangible goods to customers on the premises; wholesale shipping, receiving and storage; and design showrooms or any other space intended and primarily suitable for display of goods.

(Amended by Ord. 249-23, see Sec. 102 history note.)

One Ownership. Ownership of a parcel or contiguous parcels of property or possession thereof under a contract to purchase by a person or persons, firm, corporation or partnership, individually, jointly, in common, or in any other manner whereby such property is under single or unified control. The term shall include condominium ownership. The term "owner" shall mean the person, firm, corporation or partnership exercising one ownership as herein defined.

Open Air Sales. A Commercial Use Characteristic generally categorized as a Retail Sales and Service Use that involves open air sale of new and/or used merchandise, except vehicles, but including agricultural products, plants and gardening supplies, building materials, crafts, and/or art work.

(Amended by Ord. 182-19, see Sec. 102 history note.)

Open Recreation Area. A Non-Commercial Entertainment, Arts and Recreation Use that is not publicly owned which is not screened from public view, has no structures other than those necessary and incidental to the open land use, is not operated as a gainful business, and is devoted to outdoor recreation such as golf, tennis, or riding.

Open Space, Required. Any front setbacks, side or rear yards, courts, usable open space or other open area provided in order to meet the requirements of this Code.

Open Use. Any use of a lot that is not conducted within a Building.

Ornamental Fencing. A decorative metal fence made of wrought iron or fencing that gives the appearance of wrought-iron fencing, but expressly excludes plastic-based materials, barbed wire, similar non-decorative fences as well as traditional chain-link or woven wire fences. Chain-link or woven wire fences may be used if the fencing visible from the public right-of-way is bordered by rails on the top and bottom and has well-built columns that are at least 8 inches wide and are topped with caps. The columns shall be spaced no more than 8 feet apart.

Outdoor Activity Area. A Commercial Use characteristic defined as an area associated with a legally established use, not including primary circulation space or any public street, located outside of a building or in a courtyard, which is provided for the use or convenience of patrons of a commercial establishment including, but not limited to, sitting, eating, drinking, dancing, and food-service activities.

P

Parcel Delivery Service. See Service, Parcel Delivery.

Parking Garage, Private. A Non-Retail Automotive Use that provides temporary parking accommodations for automobiles, trucks, vans, bicycles, or motorcycles in a garage not open to the general public, without parking of recreational vehicles, mobile homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Parking Garage, Public. A Retail Automotive Use that provides temporary parking accommodations for automobiles, trucks, vans, bicycles, or motorcycles in a garage open to the general public, without parking of recreational vehicles, mobile homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Parking Lot, Private. A Non-Retail Automotive Use that provides temporary off-street parking accommodations for private automobiles, trucks, vans, bicycles, or motorcycles on an open lot or lot surrounded by a fence or wall not open to the general public, without parking of recreational vehicles, motor homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Parking Lot, Public. A Retail Automotive Use that provides temporary parking accommodations for private automobiles, trucks, vans, bicycles, or motorcycles on an open lot or lot surrounded by a fence or wall open to the general public, without parking of recreational vehicles, motor homes, boats, or other vehicles, or storage of vehicles, goods, or equipment. Provisions regulating automobile parking are set forth in Sections 155, 156, 303(t) or (u) and other provisions of Article 1.5 of this Code.

(Amended by Ord. 99-17; see Sec. 102 history note.)

Passive Outdoor Recreation. A Non-Commercial Entertainment, Arts and Recreation Use defined as an open space used for passive recreational purposes that is not publicly owned and is not screened from public view, has no structures other than those necessary and incidental to the open land use, is not served by vehicles other than normal maintenance equipment, and has no retail or wholesale sales on the premises. Such open space may include, but not necessarily be limited to, a park, playground, or rest area.

PDR Use. See Production, Distribution, and Repair Use.

Permeable Surface. Permeable Surfaces are those that allow water to infiltrate the underlying soils. Permeable Surfaces shall include, but not be limited to, vegetative planting beds, porous asphalt, porous concrete, single-sized aggregate, open-jointed blocks, stone, pavers, or brick that are loose-set and without mortar. Permeable Surfaces are required to be contained so neither sediment nor the permeable surface material discharges off the site.

(Amended by Ord. 202-18; see Sec. 102 history note.)

Pharmacy. A Retail Sales and Service Use in which the profession of pharmacy is practiced and where prescriptions are compounded

and offered for sale. This Section shall not be construed to limit any qualifying pharmacy from offering other retail goods in addition to prescription pharmaceuticals. Pharmacies are subject to controls in Section 202.2(a).

Philanthropic Facility. See Social Service or Philanthropic Facility.

Plan Dimensions. The linear horizontal dimensions of a building or structure, at a given level, between the outside surfaces of its exterior walls. The "length" of a building or structure is the greatest plan dimension parallel to an exterior wall or walls and is equivalent to the horizontal dimension of the corresponding elevation of the building or structure at that level. The "diagonal dimension" of a building or structure is the plan dimension between the two most separated points on the exterior walls.

Planning Commission (Commission). The San Francisco Planning Commission.

Planning Department (Department). The San Francisco Planning Department. For purposes of Article 4, may include the Planning Department's designee, including the Mayor's Office of Housing and other City agencies or departments.

Post-Secondary Educational Institution. An Institutional Education Use, public or private, that is certified by the Western Association of Schools and Colleges, provides educational services such as a college or university, and has met the applicable provisions of Section 304.5 of this Code concerning institutional master plans. Such institution may include employee or student dormitories and other housing operated by and affiliated with the institution. Such institution shall not have industrial arts as its primary course of study.

Power Plant. A Industrial Use defined as a steam, fossil-fuel, or any other type of thermal power plant. A Power Plant shall mean each individual power generation unit capable of independent operation, but shall not include on-site power generation units less than ten megawatts in size. Intensification of a Power Plant use requires Conditional Use authorization per Section 178(c), and is subject to the controls in Section 202.2(d).

Principal Façades. See Façades, Principal.

Principal (or Principally Permitted) Use. A Use permitted as of right in each established district where listed for that class of district in Articles 2, 7, 8, or 9 and as regulated in this Code. Principally permitted uses may be required to comply with the Operating Conditions of Section 202.2.

(Added by Ord. 129-17; see Sec. 102 history note.)

Production, Distribution, and Repair (PDR) Use. A grouping of uses that includes, but is not limited, to all Industrial and Agricultural Uses, Ambulance Services, Animal Hospital, Automotive Service Station, Automotive Repair, Automotive Wash, Arts Activities, Business Services, Catering, Commercial Storage, Kennel, Motor Vehicle Tow Service, Livery Stable, Parcel Delivery Service, Public Utilities Yard, Storage Yard, Trade Office, Trade Shop, Wholesale Sales, and Wholesale Storage.

(Amended by Ord. 202-18; Ord. 111-21; see Sec. 102 history note.)

Public Facility. An Institutional Use that consists of publicly or privately owned use that provides public services to the community, whether conducted within a building or on an open lot, and which has operating requirements that necessitate location within the district and is in compliance with the General Plan, including civic structures (such as museums, post offices, administrative offices of government agencies), public libraries, police stations, and transportation facilities. Such use shall not include service yards, machine shops, garages, incinerators, Utility Installations, and publicly operated parking in a garage or lot (Public Automobile Parking Garages and Public Parking Lots).

(Amended by Ord. 202-18; see Sec. 102 history note.)

Public Transportation Facility. A Utility and Infrastructure Use involving passenger terminal facilities for mass transportation of a single or combined modes including, but not limited to, aircraft, ferries, fixed-rail vehicles and buses, whether public or privately owned or operated, when in conformity with the General Plan. In Districts where such uses are permitted, conditional use authorization shall be required if the facility is: (a) an Automotive Use, as defined in this Section; and (b) other than a boarding platform, bus stop, transit shelter, or similar ancillary feature of a transit system; or(c) a landing field for aircraft.

Public Utilities Yard. A Utility and Infrastructure Use that is defined as a service yard for public utility, or public use of a similar character, if conducted entirely within an area completely enclosed by a wall or concealing fence not less than six feet high.

Q

None.

R

Rear Façade. See Façade, Rear.

Recreation. See Entertainment and Recreation Use.

Religious Institution. An Institutional Community Use with a tax-exempt status as a religious institution granted by the United States Government and that is used primarily for collective worship or ritual or observance of common religious beliefs. Such institution may include, on the same lot, the housing of persons who engage in supportive activity for the institution.

Replacement of Use. The total amount of Gross Floor Area, as defined in Section 102 of this Code, to be demolished and reconstructed by a development project.

Reproductive Health Clinic. A Retail Sales and Service Use that is a clinic licensed pursuant to applicable provisions of the California Health and Safety Code that meets both of the following requirements: a) provides directly to patients medical services consisting of Abortions or Emergency Contraception as those terms are defined in Administrative Code Section 93.3; and b) primarily specializes in

reproductive health services as defined in California Penal Code 423.1. A Reproductive Health Clinic that meets the foregoing requirements may also provide additional medical and allied health services by physicians or other healthcare professionals.

(Added by Proposition O, 11/5/2024; see Sec. 102 history note.)

Required Open Space. See Open Space, Required.

Residential Building. Any structure containing one or more Residential Units as a principal use, regardless of any other uses present in the building.

Residential Care Facility. An Institutional Healthcare Use providing lodging, board and care for a period of 24 hours or more to persons in need of specialized aid by personnel licensed by the State of California. Such facility shall display nothing on or near the facility that gives an outward indication of the nature of the occupancy except for a sign as permitted by Article 6 of this Code, shall not provide outpatient services, and shall be located in a structure which remains residential in character. Such facilities shall include, but not necessarily be limited to, a board and care home, family care home, long-term nursery, orphanage, rest home or home for the treatment of addictive, contagious or other diseases, or psychological disorders.

Residential Hotel. See Hotel, Residential.

Residential Unit. A legal conforming or non-conforming Dwelling Unit or a legal non-conforming Live/Work Unit

Residential Use. A Use Category consisting of uses that provide housing for San Francisco residents, rather than visitors, including Dwelling Units, Group Housing, Residential Hotels, Senior Housing, Homeless Shelters, and for the purposes of Article 4 only any residential components of Institutional Uses. Single Room Occupancy, Intermediate Length Occupancy, and Student Housing designations are considered characteristics of certain Residential Uses.

(Amended by Ord. 129-17; Ord. 63-20; Ord. 78-20; see Sec. 102 history note.)

Retail Workspace. A Retail Sales and Service Use open to the general public that provides space to work that is made available on a daily or hourly basis. Such use is only permitted as a principal use in conjunction with the concurrent operation of a principally or conditionally permitted Eating and Drinking Use, which Eating and Drinking Use shall (a) occupy no less than one-third of the gross floor area of the premises and (b) face the street. A Retail Workspace may provide services to the business community along with services to the general public. If the Retail Workspace exclusively provides services to the business community, it shall be considered a General Office Use as defined in the Planning Code.

(Added by Proposition H, 11/3/2020; see Sec. 102 history note.)

Restaurant. A Retail Sales and Service use that serves prepared, ready-to-eat cooked foods to customers for consumption on the premises and which has seating. As a minor and incidental use, it may serve such foods to customers for off-site consumption. It may provide on-site beer, wine, and/or liquor sales for drinking on the premises (with ABC license types 02, 23, 41, 47, 49, 59, 75, or 87); however, if it does so, it shall be required to operate as a Bona Fide Eating Place. It is distinct and separate from a Limited-Restaurant. Such businesses shall operate with the specified conditions in Section 202.2(a)(1).

It shall not be required to operate within an enclosed building so long as it is also a Mobile Food Facility. Any associated outdoor seating and/or dining area is subject to regulation as an Outdoor Activity Area as set forth elsewhere in this Code.

(Amended by Ord. 188-15; 129-17; Ord. 205-19; see Sec. 102 history note.)

Restaurant, Limited. A Retail Sales and Service Use that serves ready-to-eat foods and/or drinks to customers for consumption on or off the premises, that may or may not have seating. It may include wholesaling, manufacturing, or processing of foods, goods, or commodities on the premises as an Accessory Use as set forth in Sections 204.3 or 703(d), 803.2(d), 803.3(b)(1)(C) and 825(c)(1)(C) depending on the zoning district in which it is located. It includes, but is not limited to, foods provided by sandwich shops, coffee houses, pizzerias, ice cream shops, bakeries, delicatessens, and confectioneries meeting the above characteristics, but is distinct from a Specialty Grocery, Restaurant, and Bar. Within the North Beach SUD, it is also distinct from Specialty Food Manufacturing, as defined in Section 780.3(b). It shall not provide on-site beer and/or wine sales for consumption on the premises, but may sell beer and/or wine for consumption off the premises with a California Alcoholic Beverage Control Board License type 20 (off-sale beer and wine), if all areas devoted to the display and sale of alcoholic beverages occupy less than 15% of the Occupied Floor Area of the establishment. Such businesses shall operate with the specified conditions in Section 202.2(a)(1).

(Amended by Ord. 129-17; Ord. 202-18; Ord. 285-18; Ord. 63-20; see Sec. 102 history note.)

Retail Entertainment, Arts and Recreation. See Entertainment, Arts and Recreation, Retail.

Retail Sales and Service, General. A Retail Sales and Service Use that provides goods and/or services to the general public and that is not listed as a separate Retail Sales and Service Use in this Section 102. This use includes, but is not limited to the sale or provision of the following goods and services:

(a) Personal items such as tobacco and magazines;

(b) Household goods and service (including paint, fixtures, and hardware, but excluding other building materials);

(c) Variety merchandise, pet supply stores, and pet grooming services;

(d) Florists and plant stores;

(e) Apparel and accessories;

(f) Antiques, art galleries, art supplies, and framing service;

(g) Home furnishings, furniture, and appliances;

(h) Books, stationery, greeting cards, office supplies, copying service, music, and sporting goods; and

(i) Toys, gifts, and photographic goods and services.

(Amended by Ord. 129-17; Ord. 285-18; Ord. 111-21; Ord. 209-21; see Sec. 102 history note.)

Retail Use. A Commercial Use that includes uses that involve the sale of goods, typically in small quantities, or services directly to the ultimate consumer or end user including, but not limited to, Retail Sales and Service Uses, some Entertainment, Arts and Recreation Uses, and Retail Automotive Uses.

(Amended by Ord. 129-17; see Sec. 102 history note.)

S

Sales and Services, Non-Retail. A Commercial Use category that includes Uses that involve the sale of goods or services to other businesses rather than the end user, or that does not provide for direct sales to the consumer on site. Uses in this category include, but are not limited to: Business Services, Catering, Commercial Storage, Design Professional, General Office, Laboratory, Life Science, Non-Retail Professional Service, Trade Office, Wholesale Sales, and Wholesale Storage.

(Amended by Ord. 129-17; Ord. 249-23; see Sec. 102 history note.)

Sales and Services, Retail. A Commercial Use category that includes Uses that involve the sale of goods, typically in small quantities, or services directly to the ultimate consumer or end user with some space for retail service on site, excluding Retail Entertainment Arts and Recreation, and Retail Automobile Uses and including, but not limited to: Adult Business, Animal Hospital, Bar, Cannabis Retail, Chair and Foot Massage, Tourist Oriented Gift Store, General Grocery, Specialty Grocery, Gym, Hotel, Jewelry Store, Kennel, Laundromat, Liquor Store, Massage Establishment, Mortuary (Columbarium), Motel, Non-Auto Sales, Pharmacy, Restaurant, Limited Restaurant, General Retail Sales and Service, Financial Service, Fringe Financial Service, Limited Financial Service, Health Service, Personal Service, Retail Professional Service, Self-Storage, Tobacco Paraphernalia Establishment, and Trade Shop.

(Amended by Ord. 188-15; Ord. 129-17; Ord. 229-17; Ord. 111-21; Ord. 209-21; Ord. 249-23; see Sec. 102 history note.)

San Francisco. The City and County of San Francisco.

School. An Institution Educational Use, public or private, certified by the Western Association of Schools and Colleges that provides educational instruction to students in kindergarten through twelfth grade. Such institution may include employee or student dormitories and other housing operated by and affiliated with the institution. This use is distinct and separate from a Post-Secondary Educational Institution, which is defined under this Section of the Code.

Senior Housing. A Residential Use defined as dwellings that are specifically designed for and occupied by senior citizens. Senior Housing is subject to the conditions listed in Section 202.2(f).

(Amended by Ord. 63-20; see Sec. 102 history note.)

Service, Ambulance. A Non-Retail Automotive Use that provides medically related transportation services.

Service, Business. A Non-Retail Sales and Service Use that provides the following kinds of services primarily to businesses and/or to the general public and does not fall under the definition of Office: radio and television stations, newspaper bureaus, magazine and trade publication publishing, microfilm recording, slide duplicating, bulk mail services, parcel shipping services, parcel labeling and packaging services, messenger delivery/courier services, sign painting and lettering services, non-vehicular equipment rental, or building maintenance services.

(Amended by Ord. 188-15; Ord. 129-17; Ord. 229-17; Ord. 111-21; see Sec. 102 history note.)

Service, Financial. A Retail Sales and Service Use that provides banking services and products to the public, such as banks, savings and loans, and credit unions, when occupying more than 15 feet of linear frontage or 200 square feet of gross floor area. Any applicant for a financial service use shall provide the Planning Department with a true copy of the license issued to it by the State of California.

Service, Fringe Financial. A Retail Sales and Service Use that provides banking services and products to the public and is owned or operated by a "check casher" as defined in California Civil Code Section 1789.31, as amended from time to time, or by a "licensee" as defined in California Financial Code Section 23001(d), as amended from time to time. Any applicant for a fringe financial service use shall provide the Department with a true copy of the license issued to it by the State of California. A Nonprofit Fringe Financial Service shall mean a Fringe Financial Service that is exempted from payment of income tax under Section 23701(d) of the California Revenue and Taxation Code and Section 501(c)(3) of the Internal Revenue Code of the United States. Any such Nonprofit Fringe Financial Service shall provide the Planning Department with a true copy(ies) of its income tax documentation demonstrating its exemption from payment of income tax under State and Federal Law. A new Fringe Financial Service, with the exception of a Nonprofit Fringe Financial Service, shall not locate within one-quarter mile of an existing Fringe Financial Service.

Service, Health. A Retail Sales and Service Use that provides medical and allied health services to the individual by physicians, surgeons, dentists, podiatrists, psychologists, psychiatrists, acupuncturists, chiropractors, Sole Practitioner massage therapists as defined in Section 29.5 of the Health Code, or any other health-care professionals when licensed by a State-sanctioned Board overseeing the provision of medically oriented services. It includes, without limitation, a clinic, primarily providing outpatient care in medical, psychiatric, or other health services, and not part of a Hospital or medical center, as defined by this Section of the Code, and Sole Practitioner Massage Establishments as defined in Section 29.5 of the Health Code, but does not include other Massage Establishments, which are defined elsewhere in this Code. Health Service does not include Reproductive Health Clinic, which is defined separately in this Section 102.

(Amended by Ord. 73-15; Ord. 233-21; Ord. 37-22; Proposition O, 11/5/2024; see Sec. 102 history note.)

Service, Limited Financial. A Retail Sales and Service Use that provides banking services, when not occupying more than 15 feet of linear frontage or 200 square feet of gross floor area. Automated teller machines, if installed within such a facility or on an exterior wall as a walk-up facility, are included in this category; however, these machines are not subject to the hours of operation, as defined in this Section of the Code and as set forth in the respective zoning district. Any applicant for a limited financial service use shall provide the Planning Department with a true copy of the license issued to it by the State of California.

Service, Motor Vehicle Tow. A Non-Retail Automotive Use that provides vehicle towing service, including accessory vehicle storage, when all tow trucks used and vehicles towed by the use are parked or stored on the premises.

Service, Non-Retail Professional. A Non-Retail Sales and Service Office Use that provides professional services primarily to other businesses including, but not limited to, accounting, legal, consulting, insurance, real estate brokerage, advertising agencies, public relations agencies, computer and data processing services, employment agencies, management consultants and other similar consultants, telephone message services, and travel services. This use may also provide services to the general public but is not required to. This use shall not include research services of an industrial or scientific nature in a commercial or medical laboratory, other than routine medical testing and analysis by a health-care professional or hospital.

(Amended by Ord. 63-20; Ord. 249-23; see Sec. 102 history note.)

Service, Parcel Delivery. A Non-Retail Automotive Use limited to facilities for the unloading, sorting, and reloading of local retail merchandise for deliveries, including but not limited to cannabis and cannabis products, where the operation is conducted entirely within a completely enclosed building, including garage facilities for local delivery trucks, but excluding repair shop facilities. Within PDR Districts, this use is not required to be operated within a completely enclosed building. Parcel Delivery Service for merchandise or products other than cannabis and cannabis products is not allowed as an accessory use to any other principal use.

(Amended by Ord. 229-17; Ord. 47-24; Ord. 54-24; Ord. 113-24; see Sec. 102 history note.)

Service, Personal. A Retail Sales and Services Use that provides grooming services to the individual, including salons, cosmetic services, tattoo parlors, and health spas, bathhouses, and steam rooms. Personal Service does not include Massage Establishment or Gym, which are defined separately in this Section 102.

(Amended by Ord. 285-18; Ord. 111-21; see Sec. 102 history note.)

Service, Retail Professional. A Retail Sales and Service Use that provides primarily to the general public, general business, or professional services including, but not limited to, management, clerical, accounting, legal, consulting, insurance, real estate brokerage, and travel services. It may provide services to the business community, provided that it also provides services to the general public. Otherwise, it shall be considered a Non-Retail Professional Service Use as defined in this Section 102.

This use does not include research service of an industrial or scientific nature in a commercial or medical laboratory, other than routine medical testing and analysis by a health-care professional or hospital.

(Amended by Ord. 285-18; Ord. 63-20; Ord. 249-23; see Sec. 102 history note.)

Shipyard. An Industrial Use that includes the building and repairing of ships.

Single Room Occupancy (SRO) Unit. A Residential Use characteristic, defined as a Dwelling Unit or Group Housing room consisting of no more than one occupied room with a maximum gross floor area of 350 square feet and meeting the Housing Code's minimum floor area standards. The unit may have a bathroom in addition to the occupied room. As a Dwelling Unit, it would have a cooking facility and bathroom. As a group housing room, it would share a kitchen with one or more other single room occupancy unit/s in the same building and may also share a bathroom. A single room occupancy building (or "SRO" building) is one that contains only SRO units and accessory living space.

Small Enterprise Workspace (S.E.W.). An S.E.W. is a use comprised of discrete workspace units of limited size that are independently accessed from building common areas. S.E.W.'s are subject to the controls listed in Section 202.2(g).

Social Service or Philanthropic Facility. An Institutional Community Use that provides programs and/or services of a charitable or public service nature, including but not limited to arts, education, financial or housing assistance, training, and advocacy. In addition to providing their services on site, such uses may also conduct their administrative activities on site as a Principal Use.

(Amended by Proposition H, 11/3/2020; see Sec. 102 history note.)

SOMA. The area bounded by Market Street to the north, The Embarcadero to the east, King Street to the south, and South Van Ness and Division Streets to the west.

Specialty Grocery. See Grocery, Specialty.

Sports Stadium. A Retail Entertainment, Arts and Recreation Use that includes any open-air sports stadium or arena, if conducted on premises not less than 200 feet from any R District.

SRO. Single Room Occupancy.

(Added by Ord. 188-15; see Sec. 102 history note.)

Storage, Commercial. A Non-Retail Sales and Service Use defined as a facility that stores within an enclosed building: contractors' equipment, building materials, or goods or materials used by other businesses at other locations. This use shall not include the storage of waste, salvaged materials, automobiles, inflammable or highly combustible materials, and wholesale goods or commodities.

Storage, Self. A Retail Sales and Service Use defined as a facility that stores, within an enclosed building, household and personal

goods.

Storage, Volatile Materials. An Industrial Use defined as bulk storage of inflammable, highly combustible, or explosive materials.

Storage, Wholesale. A Non-Retail Sales and Service Use defined as a facility that stores, within an enclosed building, wholesale merchandise that is not accessory to a Wholesale Sales use. This use includes cold storage facilities, but not storage of inflammables or hazardous materials, which is covered under Hazardous Materials Storage.

Storage Yard. An Industrial Use involving the storage of building materials or lumber, stones or monuments, livestock feed, or contractors' equipment, if conducted within an area enclosed by a wall or concealing fence not less than six feet high. This use does not include Vehicle Storage or a Hazardous Waste Facility.

Story. That portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above.

Any mezzanine, or intermediate level, shall be considered part of a story constituted by another floor provided it is an open and integral part of the story or room of which it is a portion. There shall be only one such mezzanine per story and it shall have a minimum glazed or unglazed opening of 50 percent on the interior side of the room or story and an area not exceeding one-third of the floor area of the story or room in which it is located. Any mezzanine not meeting these criteria shall be considered a separate story.

(a) ***First Story.*** The highest building story with a floor level that is not more than six feet above grade at the centerline of the frontage of the lot where grade is defined.

(1) ***Grade.*** For purposes of this definition, "grade" is the point of elevation of the finished surface of the ground, paving, or sidewalk at the property line located along primary frontage, i.e., any street frontage between two consecutive streets or alleys where the total street frontage is entirely within an NC District. If the lot has more than one property line or no property line located along primary frontage, the Zoning Administrator shall choose the property line facing a street or alley where the grade is defined. In such situations, the Zoning Administrator shall favor streets that serve as major transportation routes, major or secondary thoroughfares, and streets along which other commercial districts are located. When the property line is five feet or more from the building frontage, grade shall be taken at the surface of the ground, paving, or sidewalk along the building frontage.

(2) Provisions in Section 260 of this Code shall apply in defining the point of measurement at grade, where the building steps laterally in relation to the street used to define grade.

(b) ***Second Story.*** The story above the first story.

(c) ***Third Story and Above.*** The story or stories above the second story and below the ceiling of the topmost story of a building.

(d) ***Basement.*** Space located below the first story of a building when such space is of sufficient floor to ceiling height for legal occupancy.

Street. A right-of-way, 30 feet or more in width, permanently dedicated to common and general use by the public, including any avenue, drive, boulevard, or similar way, but not including any freeway or highway without a general right of access for abutting properties.

Structural Alterations. Any change in the supporting members of a Building, such as bearing walls, columns, beams, or girders.

Structure. Anything constructed or erected that requires fixed location on the ground or attachment to something having fixed location on the ground.

Student Housing. A Residential Use characteristic defined as a living space for students of accredited Post-Secondary Educational Institutions that may take the form of Dwelling Units, Group Housing, or SRO Units and is owned, operated, or otherwise controlled by an accredited Post-Secondary Educational Institution. Unless expressly provided for elsewhere in this Code, the use of Student Housing is permitted where the form of housing is permitted in the underlying Zoning District in which it is located. Student Housing may consist of all or part of a building, and Student Housing owned, operated, or controlled by more than one Post-Secondary Educational Institution may be located in one building.

(Amended by Ord. 63-20; see Sec. 102 history note.)

T

Temporary Cannabis Sales. A Temporary Use that sells or otherwise provides cannabis and cannabis-related products for adult use, and that may also include the sale or provision of cannabis for medicinal use. A Temporary Cannabis Sales Use may only be operated by the holder of a valid Medical Cannabis Dispensary Permit from the Department of Public Health. Any authorization for a Temporary Cannabis Sales Use shall expire on January 1, 2019, pursuant to Section 205.2.

(Added by Ord. 229-17; see Sec. 102 history note.)

Tobacco Paraphernalia Establishment. A Retail Sales and Service Use where more than 10% of the square footage of Occupied Floor Area, as defined in Section 102, or more than 10 linear feet of display area projected to the floor, whichever is less, is dedicated to the sale, distribution, delivery, furnishing, or marketing of Tobacco Paraphernalia from one person to another. For purposes of Sections 249.5, 719, 723, and 744 of this Code, however, Tobacco Paraphernalia Establishments shall mean retail uses where any Tobacco Paraphernalia is sold, distributed, delivered, furnished, or marketed from one person to another. “Tobacco Paraphernalia” means paraphernalia, devices, or instruments that are designed or manufactured for the smoking, ingesting, inhaling, or otherwise introducing into the body of tobacco, products prepared from tobacco, or controlled substances as defined in California Health and Safety Code Sections 11054, *et seq.* “Tobacco Paraphernalia” does not include lighters, matches, cigarette holders, any device used to store or

preserve tobacco, tobacco, cigarettes, cigarette papers, cigars, or any other preparation of tobacco that is permitted by existing law. Cannabis Retail Uses as defined in Section 102, Temporary Cannabis Retail Uses as defined in Section 205.2, and Medical Cannabis Dispensary Uses as defined in Section 102 are not Tobacco Paraphernalia Establishments.

(Amended by Ord. 202-18; Ord. 142-23; Ord. 70-24; see Sec. 102 history note.)

Trade Office. A Non-Retail Sales and Service Use that includes business offices of building, plumbing, electrical, painting, roofing, furnace, or pest control contractors, if no storage of equipment or items for wholesale use are located on site. It may also include incidental accessory storage of office supplies and samples if the storage of equipment and supplies does not occupy more than one-third of the total Gross Floor Area of the use. Such Trade Offices shall operate in a manner to reduce noise, vibration, and emissions impacts beyond the premises of the use. No processing of building materials, such as mixing of concrete or heating of asphalt shall be conducted on the premises. Parking, loading, and unloading of all vehicles used by the contractor shall be located entirely within the building containing the use.

(Amended by Ord. 70-23; see Sec. 102 history note.)

Trade School. An Institutional Education Use, public or private, where industrial arts is the primary course of study. Such use is not required to submit an institutional master plan pursuant to Section 304.5 of this Code.

Trade Shop. A Retail Sales and Service Use that provides custom-crafted goods and/or services for sale directly to the consumer, reserving some storefront space for display and retail service, subject to the conditions in Section 202.2. A trade shop includes, but is not limited to:

(a) Repair of personal apparel, accessories, household goods, appliances, furniture, and similar items, but excluding repair of motor vehicles and structures;

(b) Upholstery services;

(c) Carpentry;

(d) Printing of a minor processing nature, including multi-copy and blueprinting services and printing of pamphlets, brochures, resumes, and small reports, but excluding printing of books, magazines, or newspapers;

(e) Tailoring; and

(f) Other artisan craft uses, including fine arts uses. Arts Activities and Light Manufacturing shall be considered distinct from Trade Shops.

(Amended by Ord. 285-18; Ord. 111-21; see Sec. 102 history note.)

Treasurer. The Treasurer for the City and County of San Francisco.

Truck Terminal. An Industrial Use where trucks meet and transfer goods to each other for shipment to other places.

U

Urban Agriculture. See Agriculture, Urban.

Use. The purpose for which land or a structure, or both, are legally designed, constructed, arranged, or intended, or for which they are legally occupied or maintained, let, or leased.

Use Characteristic. A feature of a Use, related to its physical layout, location, design, access, or other characteristics. Use Characteristics may be regulated independently of a Use itself. Residential Use Characteristics include Single Room Occupancy, Intermediate Length Occupancy, and Student Housing. Commercial Use Characteristics include Drive-up Facility, Formula Retail, Hours of Operation, Maritime Use, Open Air Sales, Outdoor Activity, and Walk-Up Facility.

(Added by Ord. 129-17; amended by Ord. 78-20; see Sec. 102 history note.)

Use Size (Non-Residential). See Non-Residential Use Size.

Utility and Infrastructure. A Use Category that includes Community Recycling Center, Internet Service Exchange, Power Plant, Public Transportation Facility, Public Utilities Yard, Wireless Telecommunications Services (WTS) Facility, and Utility Installation.

(Amended by Ord. 166-16; Ord. 202-18; see Sec. 102 history note.)

Utility Installation. A Utility and Infrastructure Use that includes, but is not necessarily limited to, water, gas, electric, transportation, or communications utilities, or public service facility, provided that operating requirements necessitate placement at this location. This use does not include Wireless Telecommunications Services Facilities, or Public Transportation Facilities, as defined in this Section of the Code.

(Amended by Ord. 166-16; see Sec. 102 history note.)

V

Variance. An authorization to deviate from the strict application of certain Planning Code requirements pursuant to Section 305 of this Code.

(Added by Ord. 129-17; see Sec. 102 history note.)

Vehicle Storage Garage. A Retail Automotive Use that provides for the storage of buses, recreational vehicles, mobile homes, trailers, or boats and/or storage for more than 72 hours of other vehicles in an enclosed structure. It shall not include rooftop storage. A Vehicle

Storage Garage shall comply with the street frontage requirements of the district in which it is located.

Vehicle Storage Lot. A Retail Automotive Use that provides for the storage of buses, recreational vehicles, mobile homes, trailers, or boats and/or storage for more than 72 hours of other vehicles on an open lot. It shall not include rooftop storage. Vehicle Storage Lots shall comply with the Screening and Greening requirements of Section 142.

Vehicular Use Area. An area of a lot not located within any enclosed or partially enclosed structure and that is devoted to a use by or for motor vehicles including parking (accessory or non-accessory); and Automotive Uses that are not enclosed by a structure including, but not limited to, storage of automobiles, trucks or other vehicles; gasoline stations; car washes; motor vehicle repair shops; loading areas; and service areas. Vehicular use areas shall be subject to landscaping and screening requirements of Section 142(b).

W

Waiver Agreement. An agreement acceptable in form and substance to the City Attorney and the Planning Department under which the City agrees to waive all or a portion of the Community Improvements Impact Fee.

Walk-Up Facility. A Use Characteristic defined as a structure designed for provision of pedestrian-oriented services when located on an exterior building wall, including window service, self-service operations, and automated bank teller machines (ATMs). Such facilities shall provide waste receptacles, and be kept free of litter.

(Amended by Ord. 70-23; see Sec. 102 history note.)

Wholesale Sales. A Non-Retail Sales and Service Use that exclusively provides goods or commodities for resale or business use, including accessory storage. This use includes cannabis distribution (any use requiring License Type 11—Distributor, as defined in California Business and Professions Code, Division 10). It shall not include a nonaccessory storage warehouse.

(Amended by Ord. 229-17; see Sec. 102 history note.)

Width of a Street or Alley. Unless specified elsewhere in this Code, the width of a street or alley shall be the distance measured along a line that is perpendicular to the centerline of that street or alley and extends from the mid-point of the front property line of a given parcel to a front property line on the opposite side of that street or alley.

Wireless Telecommunications Services (WTS) Facility. A Utility and Infrastructure Use defined as a facility that sends and/or receives wireless radio frequency (RF) signals, AM/FM, microwave, or electromagnetic waves, for the purpose of providing voice, data, images or other information; including but not limited to digital (previously "cellular") mobile phone service, personal communication service and paging services. WTS Facilities may be located either inside or outside of an enclosed building.

Such facilities include, but are not limited to, directional (panel), omni-directional and parabolic antennas, related electronic equipment, power sources, screening elements, supporting equipment, towers and structures. The term does not include facilities exempt under the Federal Communications Commission's Over The Air Receiving Device rules. A WTS Facility is also referred to as a "Personal Wireless Services Facility," as defined in the Federal Communications Act.

A WTS Facility is subject to the Wireless Telecommunications Services Facility Siting Guidelines ("Guidelines") adopted by the Planning Commission, including but not limited to any design criteria included in those Guidelines.

(Amended by Ord. 166-16; see Sec. 102 history note.)

Wireless Telecommunications Services (WTS) Facility, Macro. A Macro WTS Facility is generally characterized by significant spatial effects and more than two antennas. A WTS Facility is considered a Macro WTS Facility unless determined by the Zoning Administrator to be a Micro WTS Facility.

(Added by Ord. 166-16; see Sec. 102 history note.)

Wireless Telecommunications Services (WTS) Facility, Micro. The Zoning Administrator shall determine whether a proposed WTS Facility is a Micro WTS Facility. A Micro WTS Facility is generally characterized by

(a) limited spatial effects;

(b) a small number of antennas (typically up to two);

(c) an absence of substantial cumulative effects on neighborhood character or aesthetics, when considered in conjunction with other WTS Facilities at the same project site; and

(d) a location that is not "disfavored" as specified in the Guidelines.

(Added by Ord. 166-16; see Sec. 102 history note.)

Wireless Telecommunications Services Facility, Temporary. A Wireless Telecommunications Services Facility located on a parcel of land and consisting of a vehicle-mounted facility, a building-mounted antenna, or a similar facility, and associated equipment, that is used to provide temporary coverage for a large-scale event or an emergency, or to provide temporary replacement coverage due to the removal of a permitted, permanent WTS facility necessitated by the demolition or major alteration of a nearby property.

(Added by Ord. 166-16; see Sec. 102 history note.)

X, Y, Z

None.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 69-87, App. 3/13/87; Ord. 131-87, App. 4/24/87; Ord. 32-91, App. 1/25/91; Ord. 63-91, App. 2/27/91; Ord. 14-15 , File No. 141210, App. 2/13/2015, Eff. 3/15/2015; Ord. 22-15, File No. 141253, App. 2/20/2015, Eff. 3/22/2015; Ord. 52-15 , File No. 141266, App. 4/30/2015, Eff. 5/30/2015; Ord. 73-

15, File No. 141303, App. 5/28/2015, Eff. 6/27/2015; Ord. 161-15, File No. 150804, App. 9/18/2015, Eff. 10/18/2015; Ord. 162-15 , File No. 150805, App. 9/18/2015, Eff. 10/18/2015; Ord. 188-15 , File No. 150871, App. 11/4/2015, Eff. 12/4/2015; Ord. 162-16 , File No. 160657, App. 8/4/2016, Eff. 9/3/2016; Ord. 166-16 , File No. 160477, App. 8/11/2016, Eff. 9/10/2016; Ord. 217-16, File No. 160424, App. 11/10/2016, Eff. 12/10/2016; Ord. 34-17, File No. 160925, App. 2/17/2017, Eff. 3/19/2017; Ord. 95-17, File No. 170125, App. 5/12/2017, Eff. 6/11/2017; Ord. 99-17, File No. 170206, App. 5/19/2017, Eff. 6/18/2017; Ord. 129-17, File No. 170203, App. 6/30/2017, Eff. 7/30/2017; Ord. 229-17, File No. 171041, App. 12/6/2017, Eff. 1/5/2018; Ord. 13-18, File No. 171096, App. 2/9/2018, Eff. 3/12/2018; Ord. 195-18, File No. 180268, App. 8/10/2018, Eff. 9/10/2018; Ord. 202-18, File No. 180557, App. 8/10/2018, Eff. 9/10/2018; Ord. 285-18, File No. 180806, App. 12/7/2018, Eff. 1/7/2019; Ord. 296-18, File No. 180184, App. 12/12/2018, Eff. 1/12/2019; Ord. 7-19, File No. 180917, App. 1/25/2019, Eff. 2/25/2019; Ord. 15-19, File No. 181046, App. 2/8/2019, Eff. 3/11/2019; Ord. 116-19, File No. 181156, App. 6/28/2019, Eff. 7/29/2019; Ord. 182-19, File No. 190248, App. 8/9/2019, Eff. 9/9/2019; Ord. 205-19, File No. 181211, App. 9/11/2019, Eff. 10/12/2019; Ord. 206-19, File No. 190048, App. 9/13/2019, Eff. 10/14/2019; Ord. 208-19, File No. 190594, App. 9/20/2019, Eff. 10/21/2019; Ord. 63-20, File No. 200077, App. 4/24/2020, Eff. 5/25/2020; Ord. 78-20, File No. 191075, App. 5/22/2020, Eff. 6/22/2020; Proposition H, 11/3/2020, Eff. 12/18/2020; Ord. 111-21, File No. 210285, App. 8/4/2021, Eff. 9/4/2021; Ord. 209-21, File No. 210808, App. 11/19/2021, Eff. 12/20/2021; Ord. 217-21, File No. 210807, App. 12/10/2021, Eff. 1/10/2022; Ord. 233-21, File No. 210381, App. 12/22/2021, Eff. 1/22/2022; Ord. 37-22, File No. 211263, App. 3/14/2022, Eff. 4/14/2022; Ord. 50-22, File No. 211299, App. 3/31/2022, Eff. 5/1/2022; Ord. 75-22, File No. 220264, App. 5/13/2022, Eff. 6/13/2022; Ord. 190-22, File No. 220036, App. 9/16/2022, Eff. 10/17/2022; Ord. 264-22, File No. 220811, App. 12/22/2022, Eff. 1/22/2023; Ord. 53-23, File No. 210585, App. 4/21/2023, Eff. 5/22/2023; Ord. 70-23, File No. 220340, App. 5/3/2023, Eff. 6/3/2023; Ord. 122-23, File No. 230371, App. 7/5/2023, Eff. 8/5/2023; Ord. 142-23, File No. 230410, App. 7/26/2023, Eff. 8/26/2023; Ord. 159-23, File No. 230732, App. 7/28/2023, Eff. 8/28/2023; Ord. 248-23, File No. 230446, App. 12/14/2023, Eff. 1/14/2024; Ord. 249-23, File No. 230701, App. 12/14/2023, Eff. 1/14/2024; Ord. 2-24, File No. 230704, App. 1/19/2024, Eff. 2/19/2024; Ord. 47-24, File No. 231223, App. 3/15/2024, Eff. 4/15/2024; Ord. 54-24, File No. 240169, App. 3/22/2024, Eff. 4/22/2024, Retro. 3/30/2024; Ord. 62-24, File No. 230310, App. 3/28/2024, Eff. 4/28/2024; Ord. 70-24, File No. 231225, App. 4/5/2024, Eff. 5/6/2024; Ord. 113-24, File No. 240193, App. 6/13/2024, Eff. 7/14/2024, Retro. 3/30/2024; Ord. 297-24, File No. 241055, App. 12/19/2024, Eff. 1/19/2025; Proposition O, 11/5/2024, Eff. 12/20/2024)

AMENDMENT HISTORY

Section amended in its entirety; Ord. 22-15, Eff. 3/22/2015 (for the legislative history of prior definition provisions, see the Editor's Note below). See individual definitions for subsequent amendment history notes.

CODIFICATION NOTES

1. So in Proposition H, 11/3/2020.
2. So in Ord. 75-22.
3. So in Ord. 50-22.

Editor's Note:

As part of its substantial amendments to this Code, Ord. 22-15 *consolidated the Art. 1 definitions into a single section, Sec.102 above. Previously, Art. 1 definitions had been codified under separate section numbers. For the purpose of retaining the legislative history of the now superseded Art. 1 definition provisions, the terms formerly defined in this Article are set out below, along with their history notes as they existed immediately prior to the effectiveness of Ord.* 22-15.

SEC. 102.1. ALLEY.

(Amended by Ord. 443-78, App. 10/6/78)

SEC. 102.2. ARTS ACTIVITIES AND SPACES.

(Added by Ord. 412-88, App. 9/10/88; Ord. 36-08, File No. 080157, App. 3/17/2008)

SEC. 102.3. BUILDING.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.4. COURT.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.5. DISTRICT.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 69-87, App. 3/13/87; Ord. 131-87, App. 4/24/87; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90; Ord. 217-05, File No. 050865, App. 8/19/2005; Ord. 72-08, File No. 071157, App. 4/3/2008; Ord. 298-08, File No. 081153, App. 12/19/2008; Ord. 61-09, File No. 090181, App. 4/17/2009; Ord. 90-11, File No. 110301, App. 6/9/2011, Eff. 7/9/2011; Ord. 98-11, File No. 110229, App. 6/15/2011, Eff. 7/15/2011; Ord. 196-11, File No. 110786, App. 10/4/2011, Eff. 11/3/2011; Ord. 176-12, File No. 120472, App. 8/7/2012, Eff. 9/6/2012; Ord. 182-12, File No. 120665, App. 8/8/2012, Eff. 9/7/2012; Ord. 56-13, File No. 130062, App. 3/28/2013, Eff. 4/27/2013)

SEC. 102.6. DWELLING.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.6.1. DWELLING SPECIFICALLY DESIGNED FOR AND OCCUPIED BY SENIOR CITIZENS.

(Added by Ord. 130-10, File No. 090906, App. 6/24/2010 ; amended by Ord. 62-13, File No. 121162, App. 4/10/2013, Eff. 5/10/2013)

SEC. 102.7. DWELLING UNIT.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 218-14, File No. 140381, App. 10/27/2014, Eff. 11/26/2014, Oper. 2/1/2015)

SEC. 102.8. FAMILY.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.9. FLOOR AREA, GROSS.

(Amended Ord. 414-85, App. 9/17/85; Ord. 537-88, App. 12/16/88; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90; Ord. 275-03, File No. 021577, App. 12/10/2003; Ord. 129-06, File No, 060372, App. 6/22/2006; Ord. 298-08, File No. 081153, App. 12/19/2008; Ord. 173-12, File No. 120471, App. 8/2/2012, Eff. 9/1/2012 ; Ord. 182-12, File No. 120665, App. 8/8/2012, Eff. 9/7/2012; Ord. 232-14, File No. 120881, App. 11/26/2014, Eff. 12/26/2014)

SEC. 102.10. FLOOR AREA, OCCUPIED.

(Amended Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.11. FLOOR AREA RATIO.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88 ; Ord. 182-12, File No. 120665, App. 8/8/2012, Eff. 9/7/2012)

SEC. 102.12. HEIGHT (OF A BUILDING OR STRUCTURE).

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.13. LIVE/WORK UNIT.

(Added by Ord. 412-88, App. 9/10/88; amended by Ord. 56-02, File No. 012127, App. 4/29/2002; Ord. 218-14, File No. 140381, App. 10/27/2014, Eff. 11/26/2014, Oper. 2/1/2015)

SEC. 102.14. LOT.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 15-98, App. 1/16/98)

SEC. 102.15. LOT, CORNER.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.16. LOT, INTERIOR.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88)

SEC. 102.17. NIGHTTIME ENTERTAINMENT USES.

(Added by Ord. 115-90, App. 4/6/90; amended by Ord. 172-11, File No. 110506, App. 9/12/2011, Eff. 10/12/2011)

SEC. 102.18. ONE OWNERSHIP.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.19. OPEN SPACE, REQUIRED.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.20. OPEN USE.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.21. PLAN DIMENSIONS.

(Amended by Ord. 443-78, App. 10/6/78; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.22. PRINCIPAL FACADES.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.23. STORY.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.24. STORY, GROUND.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.25. STREET.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.26. STRUCTURE.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.27. STRUCTURAL ALTERATIONS.

(Amended by Ord. 414-85, App. 9/17/85; Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.28. USE.

(Added Ord. 414-85, App. 9/17/85; amended by Ord. 412-88, App. 9/10/88; Ord. 115-90, App. 4/6/90)

SEC. 102.29. BEDROOM.

(Added by Ord. 298-08, File No. 081153, App. 12/19/2008)

SEC. 102.30. WIDTH, STREET OR ALLEY.

(Added by Ord. 298-08, File No. 081153, App. 12/19/2008)

SEC. 102.31. VEHICULAR USE AREAS.

(Added by Ord. 84-10, File No. 091453, App. 4/22/2010)

SEC. 102.32. ORNAMENTAL FENCING.

(Added by Ord. 84-10, File No. 091453, App. 4/22/2010)

SEC. 102.33. PERMEABLE SURFACES.

(Added by Ord. 84-10, File No. 091453, App. 4/22/2010)

SEC. 102.34. MOBILE FOOD FACILITY.

(Added by Ord. 297-10, File No. 101351, App. 12/3/2010)

SEC. 102.35. URBAN AGRICULTURE.

(Added by Ord. 66-11, File No. 101537, App. 4/20/2011, Eff. 5/20/2011)

SEC. 102.36. STUDENT HOUSING.

(Added by Ord. 188-12, File No. 111374, App. 9/11/2012, Eff. 10/11/2012)

SEC. 102.37. COTTAGE FOOD OPERATION.

(Added by Ord. 288-13, File No. 130998, App. 12/26/2013, Eff. 1/25/2014)

EXHIBIT 21

Introduction
to the San Francisco General Plan

Land Acknowledgement:

The City and County of San Francisco acknowledges that we are on the unceded ancestral homeland of the Ramaytush Ohlone, who are the original inhabitants of the San Francisco Peninsula. As the indigenous stewards of this land and in accordance with their traditions, the Ramaytush Ohlone have never ceded, lost, nor forgotten their responsibilities as the caretakers of this place, as well as for all peoples who reside in their traditional territory. As guests, we recognize that we benefit from living and working on their traditional homeland. We wish to pay our respects by acknowledging the Ancestors, Elders, and Relatives of the Ramaytush Ohlone community and by affirming their sovereign rights as First Peoples.

Introduction

San Francisco is a place of singular beauty, combining an exquisite natural setting with a unique human-made urban landscape. Human settlement of San Francisco originated with the Ramaytush Ohlone people, who maintained three semi-sedentary villages on the peninsula. The Spanish colonists built on or near those lands when they established the Presidio and the Mission, resulting in the eventual displacement, subjugation, and cultural erasure of these communities. Since then, the City has grown with a density that is unusual on the West Coast. Where other cities flatten their hills or wind streets around them, here the rush to develop created a defiant street grid that accentuates the inclines and introduces dramatic vistas across the bay and deep into the cosmopolitan center. San Francisco's lively and varied pattern of neighborhoods, commercial centers, and parks has nurtured a remarkable diversity of communities. It has been not only a hub for the Bay Area but a global center of economic energy, technological innovation, and influential political, social, and cultural movements.

Amid this beloved setting lies the inherent, often hidden fragility, including vulnerability to natural disasters and to the mounting consequences of anthropogenic climate change. The city has also been shaped by a history of injustices including segregation, urban renewal, and the inequitable distribution of environmental benefits and burdens. The City's human scale is justly celebrated for its charm and livability – but the City continues to struggle with housing affordability.

Purpose

The San Francisco General Plan is the embodiment of the City's vision for the future, serving to guide evolution and growth over time. It provides a comprehensive set of goals, objectives and policies that influence how people live, work, and move about, as well as the quality and spirit of the City. Periodic updates via a public adoption process ensure that this document remains freshly relevant. The General Plan governs actions by all arms of San Francisco's government. It is implemented by the city's direction of public resources and guidance of private development.

State law and San Francisco's Charter require a comprehensive, long-term general plan for the physical development of the city. The San Francisco General Plan ensures that there is adequate infrastructure to support residential, commercial, recreational and institutional land uses and facilities, and that neighborhoods are walkable and connected by a robust transportation system geared toward public transit, walking, and biking. Economic growth should position San Francisco for a resilient future sustainably linked to and coordinated with regional development.

The General Plan attempts to navigate complex imperatives between preserving cherished qualities and assets, tackling needed changes, and preparing for both known and unpredictable challenges and crises. In 2020, as the COVID-19 pandemic and the killing of George Floyd highlighted inequalities, the Planning Commission passed Resolution Number 20738 to center the Planning Department's work program and resource allocation on racial and social equity. This mandate has been incorporated into the General Plan. In doing so, the City and County of San Francisco acknowledges and apologizes for the history of inequitable planning policies and actions that have resulted in racial disparities. San Francisco must take reparative actions and build accountability in collaboration with American Indian communities, Black communities, communities of color, and other historically marginalized and disenfranchised communities.

Process and Vision

The General Plan's goals, objectives and policies have been developed with extensive community engagement. These robust conversations and public hearings are designed to distill a shared vision for the City's future.

In this shared vision, San Francisco strives to be...

> *...a just city, committed to racial and social equity, starting with recognizing and seeking to rectify past injustices.*
>
> *…an inclusive city, where all can find a home and community as well a nurturing environment for creativity and self-expression.*
>
> *...a safe, livable and environmentally sustainable city, where all are able to live healthy lives and access thriving natural systems, restorative parks, and a high-quality built environment. The climate crisis requires urgent local, regional, and global action.*
>
> *...an economically vital city, where all are able to prosper. Economic vitality is possible only where stable, meaningful livelihoods are protected, entrepreneurial dynamism is fostered within an ecosystem that can withstand geopolitical turbulence and financial volatility, and everyone can access ladders to opportunity.*
>
> *...a city that recognizes that achieving justice, inclusivity, safety, livability, environmental sustainability and economic vitality requires accountable government, regional cooperation, transparent processes, and incorporation of diverse communities into all aspects of decision making.*

Structure

The General Plan consists of a series of Elements and Area Plans.

Each Element addresses a topic and generally applies citywide, while Area Plans relate these topics comprehensively to specific parts of the city in a greater level of detail. Several of the Elements correspond to topics that state law requires the General Plan to address, including Air Quality, Community Facilities, Environmental Protection, Housing, Recreation and Open Space, Safety and Resilience, and Transportation. San Francisco has also chosen to address additional topics through Elements including Arts, Commerce and Industry, and Urban Design. Policies related to land use are located throughout the General Plan and are cross-referenced in a Land Use Index.

Environmental Justice policies required by the State have been integrated throughout the General Plan. The Environmental Justice Framework, hereby incorporated into the General Plan by reference, sets out key policy priorities and strategies which will be integrated into elements, area plans, and supporting documents to improve public health and other outcomes in Environmental Justice Communities, which are primarily communities of color and lower-income communities that face higher pollution levels and other health risks.

Area Plans of the San Francisco General Plan include:

- Balboa Park Station
- Bayview Hunters Point
- Candlestick Point *Subarea*
- Central SoMa (South of Market)
- Central Waterfront
- Chinatown
- Civic Center
- Downtown
- East SoMa (South of Market)
- Executive Park *Subarea*
- Glen Park
- Hunters Point Shipyard
- Market and Octavia
- Mission
- Northeastern Waterfront
- Rincon Hill
- Showplace Square/Potrero
- Transit Center District *Subarea*
- Treasure Island/Yerba Buena Island
- Van Ness Avenue
- Western Shoreline
- Western SoMa (South of Market)

Amended by the Board of Supervisors Ordinance No. 0084-23 on 05/09/2023.
Amended by Resolution No.14149 adopted on 06/27/1996.

San Francisco Planning Department
sfplanning.org

Questions or comments on the General Plan? Please email us at pic@sfgov.org.

EXHIBIT 22

CITY OF SAN FERNANDO

REVISED GENERAL PLAN

Prepared For:

City of San Fernando
117 MacNeil Street
San Fernando, California 91340-2993

Prepared By:

Castaneda & Associates
14841 Yorba Street, Suite 100
Tustin, California 92680

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I.
INTRODUCTION AND BACKGROUND

I.
INTRODUCTION AND BACKGROUND

PURPOSE AND FUNCTION

The 1987 General Plan establishes a statement on the future of the community and indicates how the City plans to respond to diverse human needs such as shelter, commerce, employment, recreation and the protection of health, safety and welfare. The General Plan establishes the manner in which these needs will be met by the adoption of city policies for several areas of concern which are called "elements." Each "element" deals with a major aspect of the human and physical environment which makes up the San Fernando community. There are seven elements which are required to be included in a modern General Plan -- land use, circulation, housing, open space, conservation, safety and noise.

San Fernando, which is predominantly a residential community characterized by low rise buildings, is almost entirely built-out. The 1987 General Plan establishes a complete and adequate general plan and also resolves several issues affecting the built and unbuilt environment of the City. With the adoption of all the elements, the City now has a complete and adequate General Plan meeting the requirements of the State planning law. In addition, the Planning Commission and City Council are in on informed position to

resolve several land use issues that affect sub-areas of the community. These "issue areas" include those in the list below:

1. Mission Boulevard
2. San Fernando/Truman Street
3. San Fernando Airport area
4. Kalisher Street
5. Commercial land use and zoning designations
6. Multiple-family land use designations

GENERAL PLAN LEGISLATION

Originally, a general plan consisted of only a "land use" element and "circulation" element. In the past 20 years several other elements were added to the general plan including housing, open space, conservation, safety and noise. Most of these elements were added to the General Plan in the early 1970's in response to issues and problems which the State legislature determined needed the attention of local government. The "Housing Element", for instance, was added to the list of mandatory elements in 1967 because the home building industry considered it a means to increasing housing production. Since then the State legislature has made several refinements to the general plan housing element requirement. Another example is the "Seismic Safety Element" which became a mandatory element following the public concern for health and safety that was evident after the devastating effects of the local earthquake in February 1971.

In 1984, the most recent revisions to the legislation governing the preparation of general plans were enacted. One revision combined the "Seismic Safety Element" and the "Safety Element" into a single document which must include generally the same information as previously contained in the two elements. The requirement for a "Scenic Highways Element" was deleted and changes were made regarding the information and methods of preparing the "Noise Element".

Another major revision related to the <u>Implementation</u> of a general plan after it is adopted by the Planning Commission and the City Council. Section 65400 of the Government Code was amended to read:

Section 65400. After the legislative body has adopted all or part of a general plan, the planning agency shall do all of the following:

(a) Investigate and make recommendations to the legislative body regarding reasonable and practical means for implementing the general plan or any element of the general plan, so that it will serve as an effective guide for the orderly growth and development, preservation and conservation of open-space land and natural resources, and the efficient expenditure of public funds relating to the subjects addressed in the general plan.

(b) Provide an annual report to the legislative body on the status of the plan and progress in its implementation. (emphasis added)

The 1987 General Plan completely meets the letter and spirit of the revisions made to Government Code Section 65400. Each element contains a detailed list and description of current and proposed "implementing actions".

Another requirement that is met by the 1987 General Plan is the "housing" element update. Article 10.6 of the Government Code requires that this element be reviewed and updated periodically but no later than once every five-years. The 1987 General Plan includes the updated Housing Element.

DEFINITIONS OF KEY PLANNING TERMS

The Government Code uses several words that at best may be called "planning terminology." Definitions for these terms, however, are not provided. Some of the planning terms that will be used in the 1985 General Plan are goal, objective, policy, implementation action and program. These terms are defined in the "General Plan Guidelines" prepared by the State Office of Planning and Research, as follows:

Goal: The ultimate purpose of an effort stated in a way that is general in nature and immeasurable.

Objective: A measurable goal. Example -- "To reduce peak-hour traffic congestion to service level "C" by 1984".

Policy (1): A collective term describing those parts of a general plan that guide action, including goals, objectives, policies, principles, plan proposals, and standards in both text and diagrams.

Policy (2): A specific statement guiding action and implying clear commitment. Example -- "Recreational uses in wildlife refuges and nature preserves shall be limited to those activities which are compatible with maintaining the environment with a minimum of disruption, such as hiking and horseback riding".

Implementation Program (Action Program): A coordinated set of measures to carry out the policies of the general plan. Example -- Open space action program for implementing open space policies.

Implementation Measure: An action, procedure, program or technique that carries out general plan policy. Example -- "Develop a geologic hazard overlay zoning classification and apply it to all geologic hazard areas identified in the general plan".

Several of the elements have terms unique to their intent and purpose. For instance, the "housing" element is the only one which refers to the planning term "objectives". In this instance, the term means "numerical targets" which represent the maximum feasible effort by the City that can be achieved during a five-year period. Another example is the "noise" element which contains many technical terms and concepts. The terms and concepts unique to each element will be included in a Technical Appendix. The intent and purpose of each element will be described briefly in the discussion of each element. The legislative definitions of each element will be reproduced in a Technical Appendix.

PREVIOUS GENERAL PLAN

The previous General Plan consisted of the elements that were adopted on October 1, 1973 (C.C. Resolution #4694, P.C. Resolution # 502 and 516) which included Population, Circulation, Public Facilities, Land Use and Housing. The Seismic Safety Element was not adopted in October 1973. In addition, the current General Plan includes the Open Space Element that was adopted by the Planning Commission and City Council in May, 1973. Finally, the General Plan includes the updated Housing Element that was approved in September 1983.

As a result, the City needed three elements to have a complete General Plan -- Conservation, Safety and Noise. In addition, other elements needed to be updated to reflect present-day interests and values and satisfy the content requirements of the most recent planning legislative requirements. The emphasis of the 1987 General Plan is to adopt the three elements mentioned above, to update the remaining elements particularly the Land Use Element, and to incorporate the ways of resolving the issues and concerns affecting certain sub-areas of the community.

REVISED GENERAL PLAN

A major function of the 1987 General Plan is to consolidate or pull together all of the elements into a single document and thereby provide an opportunity to establish a uniform data base and set forth internally consistent policy statements. The revised General Plan includes the following elements: Land Use, Circulation, Housing, Open Space/Conservation/Parks, Safety and Noise. The 1987 General Plan achieves several purposes, as listed below:

1. Prepare and adopt one document which is understood by the community's residents, businesses and developers.

2. Incorporate all the data requirements of each element into a Technical Appendix.

3. Present each element according to a common format.

4. Update the contents of the elements adopted in 1973 and 1983.

5. Focus on the most important aspects of each element.

6. Achieve a General Plan that in written statements and illustrations communicates to the community the positions of the Planning Commission and City Council on San Fernando's future revitalization and development.

II.
REGIONAL AND LOCAL SETTING

REGIONAL SETTING

San Fernando is bordered on the north and west by the Simi Hills and the Santa Susana Mountains. The Santa Monica Mountains, to the south, separate the area from the Los Angeles Basin, while the San Gabriel Mountains lie to the northeast. Although San Fernando lies close to the base of the San Gabriel Mountains, most land within the City exhibits a very gentle slope with elevations ranging form a low of 1,017 feet to a high of 1,250 feet above sea level.

San Fernando lies on a portion of an alluvial fan resulting from the deposition of alluvial materials from the steeply sloping canyons to the north and east. Major contributors include the Pacoima Wash, May Canyon, Wilson Canyon and Sombrero Canyon. Deposits of sands, gravels and conglomerates up to 1,500 feet in depth are found in the area. These materials overlie a greater thickness of poorly sorted non-marine sediments (Saugus Formation), which in turn overlies up to 18,000 feet of older sediments.

San Fernando exhibits a climate similar to most other portions of the San Fernando Valley. The variance in climate is moderate with warm dry summers and precipitation usually occurring in the winter and early spring months. The average annual rainfall is approximately 17 inches. Sunshine is abundant during the summer and fall months. Temperatures range from a mean minimum of 46.2 degrees to a mean maximum of 79.4 degrees. Prevailing winds are from the south.

The City of San Fernando is strongly affected by surrounding communities. A portion of the labor force comes form outlying areas and commercial facilities within the City are dependent on trade for the surrounding region. Consequently, commercial, industrial, recreational and housing demands in San Fernando follow a pattern more representative of a larger city.

LOCAL SETTING

Development of the San Fernando Valley was initiated with the establishment of the Mission de San Fernando Rey in 1797 under the leadership of padres Fermin Lasuen and Francisco Dumetz. Lands adjacent to the Mission were used for farming and raising herds of cattle. After passing through various ownerships, half of the mission tract was sold to George K. Porter, a San Francisco shoe manufacturer, and Senator Charles Maclay in 1874. On September 15, 1874 they filed a tract map entitled Map of the City of San Fernando and were credited as being the initial subdividers of San Fernando.

The subdivision included that portion of the City south of the Southern Pacific Railroad tracks and a portion of the City of Los Angeles extending southwest to the Mission. This subdivision established much of the City's street pattern with many of the streets still retaining their original names. Present land use patterns were being formed at this time and a period of rapid growth from 1920 to 1930 witnessed a further consolidation of land uses. The first zoning ordinance and plan, adopted in 1929, reflected land uses as of that date. Changes in land use and zoning patterns since then have been relatively minor.

The City contains approximately 2.4 square miles and is completely surrounded by the City of Los Angeles. Residential uses occupy approximately 620 acres or 39 percent of the City. Some of the developed area was destroyed during the February 1971 earthquake. Approximately nine percent of the City is vacant, which provides a potential for new development. The major portion of any new growth will have to occur in areas of regeneration. Expansion through annexation would not be feasible due to the City being completely surrounded by the City of Los Angeles.



Regional Location Map
SAN FERNANDO GENERAL PLAN

EXHIBIT II-1

III.
GENERAL PLAN OVERVIEW

III.
GENERAL PLAN OVERVIEW

INTRODUCTION

A major function of the General Plan is to consolidate all of the elements into a common format and thereby provide an opportunity to establish a uniform data base and set forth consistent and contemporary policy statements. Over the years, the Planning Commission and City Council have adopted several elements acknowledging local needs and changing planning requirements under California planning law.

DESCRIPTIONS OF REQUIRED ELEMENTS

The Land Use Element establishes guidelines for the public and private uses of land, including residential; commercial; industrial; open space, parks and recreation; and public facilities and buildings. The element explains these land use categories and, in text and map form, identifies their location and intensity of use.

The Circulation Element establishes a plan for the achievement of a transportation system which provides for efficient intra-and inter-City movement of motor vehicles. The

circulation and transportation system is designed to meet the facility demands generated by planned land uses. The Circulation Element sets forth a framework for an orderly pattern of development, providing maximum transportation efficiency while minimizing adverse impacts to the City's environmental quality.

The Housing Element is concerned with how well the current and future housing supply meets the needs of San Fernando's residents. The element, in particular, deals with the physical condition of housing; financial assistance needs of resident households; need for new housing construction; improving upon the City's role in housing; and achieving equal housing opportunity.

The Open Space/Conservation/Parks Element designates open space areas for the following purposes: managed production of resources; outdoor recreation; public health and safety; and preservation of natural resources. The Conservation section of the Element deals with the conservation, development and utilization of natural resources. The Parks section of the Element consists of an inventory, analysis and policy recommendations for the City's park and recreation resources. A Parks Element is an optional element of the General Plan and because it relates closely to open space and conservation issues, these three elements have been combined in a single element.

The Safety Element is intended to establish information and guidelines which result in protecting the San Fernando community from any unreasonable risks associated with the effects of seismically induced hazards; other geologic hazards; flooding; wildland and urban fires; and hazardous wastes. This element also addresses items related to fire hazards such as evacuation routes, peak load water supply requirements and minimum road widths and clearances around structures.

The purpose of the Noise Element is to provide information on current and future noise levels in the City. In undeveloped areas, this information then is used to identify the most suitable locations for land uses particularly sensitive to noise impacts. In San Fernando, the adopted Noise Element will facilitate the enforcement of standards and codes and thereby protect the health and well-being of the persons living and working in San Fernando.

IV.
LAND USE ELEMENT

IV.
LAND USE ELEMENT

INTRODUCTION AND BACKGROUND

General Plan Legislation

The adoption of a General Plan by cities and counties became a legal requirement 33 years ago in 1955. At that time, a General Plan consisted only of a Land Use Element and a Circulation Element. In 1971, the Legislature created one of the most important features of State planning law by requiring that zoning and subdivision approvals be consistent with the General Plan. Government Code Section 65302 (a) defines the Land Use Element as follows:

> A Land Use Element which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The Land Use Element shall include a statement of the standards of population density and building density recommended for the various districts and other territory covered by the plan. The Land Use Element shall also identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to such areas.

Purpose and Function

The purpose of the Land Use Element is to establish a pattern for compatible land uses to reflect existing conditions and to guide future development. By law, the element must set clear standards for the density of population and the intensity of development for each proposed land use category. The Land Use Element which has the broadest scope of the seven required elements, provides a composite discussion of the issues which are addressed in the other elements through text, diagrams and a land use map.

The General Plan, particularly the Land Use Element, governs the future direction of a local jurisdiction. Prior to 1971, the General Plan was considered just a guideline; however, because of the consistency requirement enacted in 1971, the General Plan has assumed greater importance. Consistency with the adopted General Plan is now mandatory for all land use approvals.

In addition to the seven mandated elements of the General Plan, other optional elements may be included to address areas of concern that, in the judgement of the City, relate to the physical development of the community. Once an optional element has been adopted, it is as important and legally binding as a mandatory element.

Section 65300.5 of the Government Code requires that the General Plan be consistent throughout (i.e., "internally consistent"). The assumptions and projections used in the Housing Element, for instance, must be consistent with those used in the Land Use Element and the Open Space Element. Local policies must not conflict with Statewide policies pertaining to housing, open space and environmental quality.

Land use categories designated by the General Plan must be defined in terms of population density and building intensity. Allowable uses for each district must be indicated. Density ranges must be given for residential designations to facilitate implementation through zoning districts. Zoning laws regulate the geographic allocation and allowed uses of land. Finally, the Zoning Ordinance must conform to the adopted General Plan. It is one of the implementation measures used to achieve the goals and objectives of the General Plan.

Several zoning designations <u>may</u> be encompassed within one General Plan land use category. Therefore, the zoning of a property may change without requiring a change

In the land use designation. The General Plan has a long term perspective. It must be structured enough to provide overall direction with adequate flexibility to accommodate changing conditions.

ISSUES AND OPPORTUNITIES

The former San Fernando General Plan contained 12 land use designations. The 12 categories, which are defined in Chart IV-1, are listed below:

Residential

1. Low Density
2. Medium Density
3. High Density

Commercial

4. Central Business District
5. Neighborhood Shopping
6. Highway Related
7. Automotive Sales and Services
8. Multi-Use

Industrial

9. Light Industrial
10. Industrial

Other

11. Public/Quasi-Public
12. Neighborhood Park/Landscaping

A major focus of the General Plan Update and the efforts of the Citizens Advisory Committee was to reexamine the appropriateness of these land use categories and how they have been applied to different areas of the City.

Upon review of available data and existing development conditions, the following issue areas emerged as warranting more detailed analysis from a land use planning standpoint:

1. Central Business District
2. San Fernando - Truman Area
3. Kalisher Street
4. Mission Boulevard
5. Airport Site
6. Glenoaks Boulevard
   Medium Density/Neighborhood Commercial
7. Recreation Park Surplus Land
8. Brand Boulevard High Density
9. Multi-Use on McClay

Each of these issues are described in Part A of the Technical Appendix. Background data are presented for each issue in the following terms:

1. Description of the Land Use Issue
2. Existing Conditions and Surrounding Land Uses
3. Current Land Use and Zoning Designations
4. Identification of Problems and Opportunities
5. Alternative Courses of Action

Exhibit IV-1 shows the location of the various areas. A synopsis of land use issues follows.

Central Business District

There is no zoning designation to implement the Central Business District land use designation. More specific guidance is needed to realize the economic potential of the CBD and to create a distinct visual identity for this area.

San Fernando-Truman Area

In this portion of the City, the existing Land Use Element designation is not consistent with the current zoning. The land use designation is Industrial and the zoning categories are M-1, C-2 and R-2.

Kalisher Street

The primary land use issues associated with this area are incompatibility of existing uses and land use intensity. Kalisher Street is designated Multi-Use Commercial on the General Plan and the surrounding neighborhood is designated Medium Density Residential. Kalisher Street contains a mixture of residential, commercial and quasi-public uses.

Mission Boulevard

The study area is presently designated Multi-Use Commercial on the General Plan. The area contains both commercial and residential uses. The issue is whether to retain the Multi-Use designation or adopt a Commercial designation.

Airport Site

The issue regarding this study area is the choice of an appropriate designation for the former San Fernando airport, located in the northeastern portion of the City.

Glenoaks Boulevard -- Medium Density/Neighborhood Commercial

While this area is designated Medium Density and Neighborhood commercial on the General Plan, development has remained primarily low density residential.

Recreation Park Surplus Land

The issue is whether to retain this property as a park site on the revised General Plan.

Brand Boulevard High Density Residential

Within this area, the zoning is not consistent with the General Plan designation. The study area is shown on the General Plan as High Density Residential. Zoning is R-1, Single Family Residential.

Multi-Use on McClay

The issue is whether to retain the Multi-Use designation or change the designation to commercial, which reflects existing development.

Goals and Objectives

Goals:

- To retain the small town character of San Fernando.
- To promote economic viability of commercial areas.
- To maintain an identity that is distinct from surrounding communities.

Objectives:

- To conserve single family neighborhoods.
- To attract new commercial activities, particularly within the downtown area.

Implementation Measures

Possible land use alternatives for the various issue areas were reviewed by the General Plan Citizens Advisory Committee at several meetings. The Committee meetings included a workshop held at the Santa Rosa Church to solicit comments from residents and business owners in the Kalisher Street area. The Planning Commission held several hearings to receive public testimony and to consider the range of land use alternatives

for each area under study. The Planning Commission recommendations were then submitted to the City Council.

The recommended land use designations for the issue areas are identified below and shown in Exhibit IV-11.

Central Business District

Change the CBD boundaries to the following:

- North - Railroad Tracks
- West - Mission Boulevard
- East - Chatsworth Drive
- South - Celis Street

San Fernando - Truman

From the railroad track to Truman Street, Industrial except for the corner parcel bounded by the railroad track to the north, Hubbard Avenue to the west, Meyer Street to the east and Truman Street to the south. That parcel and the area from Truman Street to San Fernando Road will be commercial.

Kalisher Street

Kalisher Street will be commercial from Pico to Coronell, then medium density residential from the south side of Coronell to the City limit.

Mission Boulevard

This area will be commercial from Pico to Mott, then medium density residential from the south side of Mott to the City limit.

Airport Site

The northern third of the property will be commercial. The remainder will be industrial.

Glenoaks Boulevard

The area bounded by Pioneer Park to the north, Harding to the west, Alexander to the east and Glenoaks to the south will be medium density. The area bounded by Lucas to the north, Brand to the east, Glenoaks to the south and an alley to the west will also be medium density. The remainder of that study area will be low density residential.

Residential Park

Retain Park land use designation.

Brand Boulevard

This area will be office professional from Celis to the north side of Kewen, the low density from the south side of Kewen to O'Melveny.

Maclay

Change of designation to commercial.

The complete Land Use Element Map is shown as Exhibit IV-111.

Internal Consistency

The Land Use Element is a synthesis of the other General Plan elements. It designates open areas identified in the Open Space/Conversation/Parks Element. The selection of land uses is also influenced by technical data contained in the Noise, Safety and Circulation Elements. The range of residential designations reflects the needs identified in the Housing Element.

CHART IV-I

CITY OF SAN FERNANDO
CURRENT LAND USE ELEMENT CATEGORIES
AND IMPLEMENTING ZONES

LAND USE	INTENT OF LAND USE DESIGNATIONS	IMPLEMENTING ZONES
Residential		
Low Density Residential	Single family dwellings at a density of 0-6 dwelling units per acre.	R-I
Medium Density Residential	Single family dwellings, duplexes and multiple-family dwellings at a density of 6-17 dwelling units per acre.	R-2
High Density Residential	A diversity of multiple-family housing types at a density of 17-43 dwelling units per acre.	R-3 RPD
Commercial		
Central Business District	A major retail area of community-wide significance.	C-2
Neighborhood Shopping	Commercial uses which provide for the immediate shopping needs of nearby residents.	C-I
Highway Related Commercial	Commercial development located along major arterials.	No specific zone
Automotive Sales and Services	To consolidate automobile sales and service facilities while protecting them for the encroachment of incompatible uses.	No specific zone

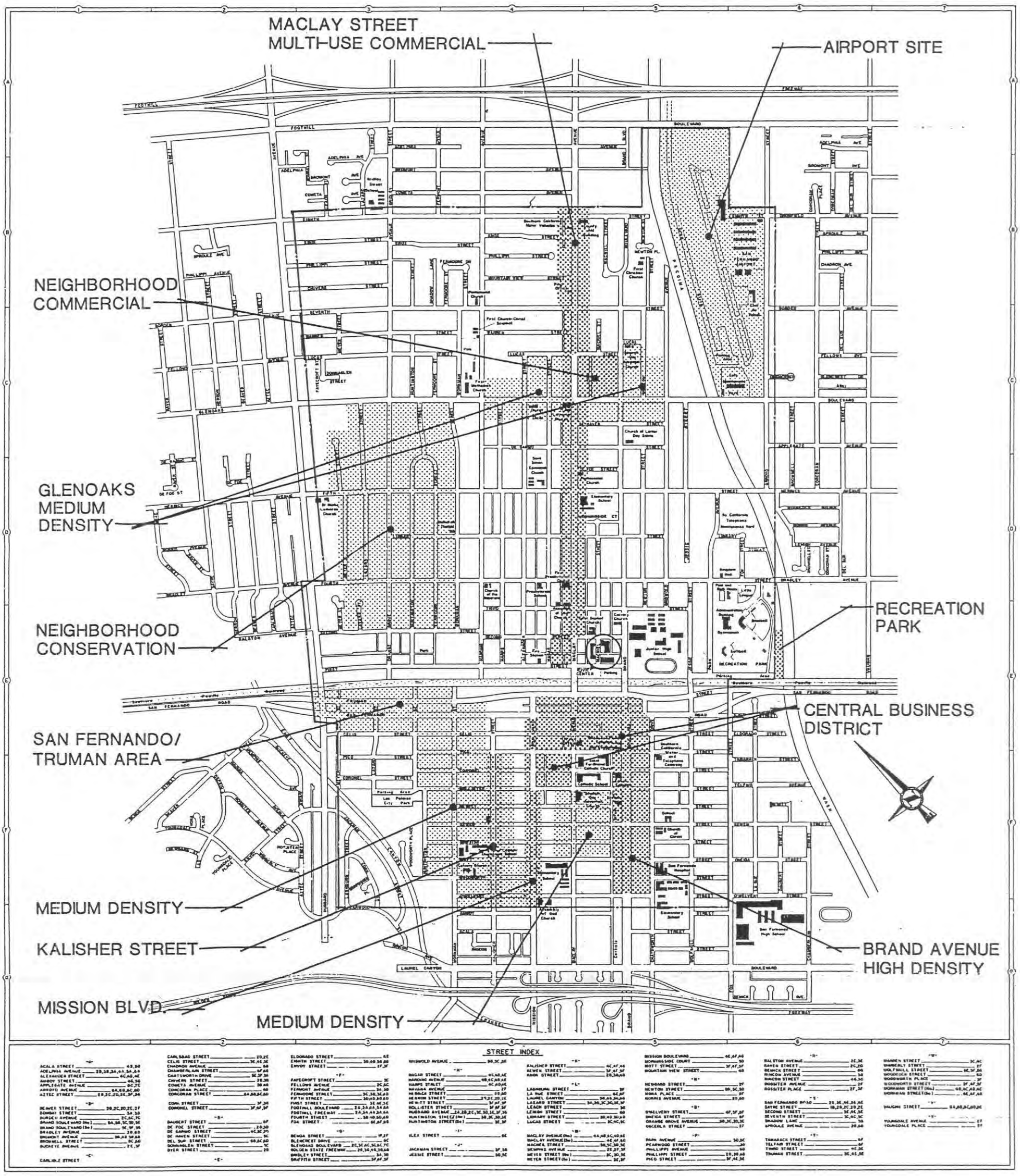
Land Use	Intent of Land Use Designations	Appropriate Zones
Multi-Use	Areas that lend themselves to more than one type of development, facilitating a mixture of commercial, office and residential uses.	No specific zone
Industrial		
Light Industrial	Provides for the operation of light manufacturing uses and related services.	M-1
Heavy Industrial	To provide for a variety of industrial activities under development standards designed to limit impacts on surrounding land uses.	M-2
Public/Quasi-Public	Provides the necessary infrastructure to maintain a quality living environment. Such facilities include school and the civic center.	No specific zone
Neighborhood Park/Landscaping	Defines active and passive recreational facilities.	No specific zone

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SAN FERNANDO

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INCORPORATED AUGUST 31, 1911



Land Use Issue Areas
SAN FERNANDO GENERAL PLAN

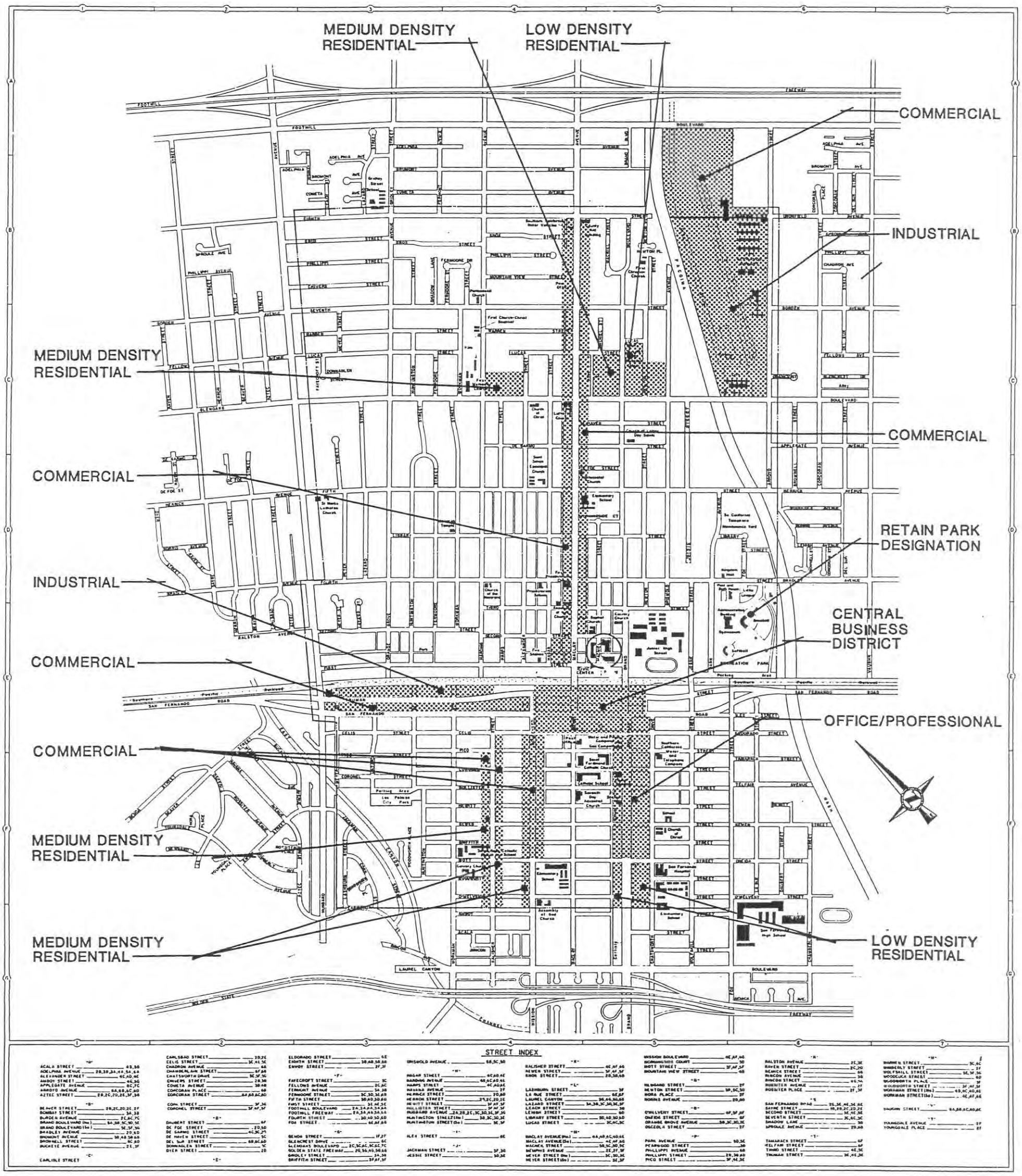
EXHIBIT IV-I

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INCORPORATED AUGUST 31, 1911



STREET INDEX

"A"
ACALA STREET 4G,3G
ADELPHIA AVENUE 2B,3B,3A,4A,5A,6A
ALEXANDER STREET 4C,4D,4E
AMBOY STREET 4G,3G
APPLEGATE AVENUE 6C,7C
ARROYO AVENUE 6A,6B,5C,6D
AZTEC STREET 2B,2C,2D,2E,3F,3A

"B"
BEAVER STREET 2B,2C,2D,2E,2F
BOMBAY STREET 3A,3B
BORDEN AVENUE 7C,6C,7C
BRAND BOULEVARD (No.) 6A,3B,5C,3D,5E
BRAND BOULEVARD (So.) 5E,5F,5G
BRADLEY AVENUE 2D,6D
BROMONT AVENUE 3B,4B,5B,6B
BROWNELL STREET 3C,6D
BUCHANAN AVENUE 2E,3F

"C"
CARLISLE STREET 2D,2E
CARLSBAD STREET 2D,2E
CELIS STREET 3E,4E,5E
CHADRON AVENUE 6A
CHAMBERLAIN STREET 6F,6G
CHATSWORTH DRIVE 3E,3F,3G
CHIVERS STREET 2B,3B
COMETA AVENUE 3B,4B
CORMORAN PLACE 6B
CORCORAN STREET 6A,6B,6C,6D
COPA STREET 3F,3G
CORONEL STREET 3F,4F,5F

"D"
DAUBERT STREET 6F
DE FOE STREET 2D,3D
DE LAMO STREET 4C,3C,2D
DE NAVEN STREET 5C
DEL SUR STREET 6B,6C,6D
DONNAGLEN STREET 1C
DYER STREET 2D

"E"
ELDORADO STREET 6E
EIGHTH STREET 3G,4G,5G,6G
ENVOY STREET 2F,3F

"F"
FAYECROFT STREET 3C
FELLOWS AVENUE 3C,4C
FERMONT AVENUE 5A,3B
FERNOOKE STREET 3C,3D,3E,4B
FIFTH STREET 3G,4G,3D,5D
FIRST STREET 3E,4E,5E
FOOTHILL BOULEVARD 2A,3A,4A,5A,6A
FOOTHILL FREEWAY 2A,3A,4A,5A,6A
FOURTH STREET 3D,4D,5D,6D
FOX STREET 6A,6F,6G

"G"
GENOA STREET 1F,2F
GLENCREST DRIVE 6C
GLENOAKS BOULEVARD 2C,3C,4C,5C,6C,7C
GOLDEN STATE FREEWAY 2D,3G,4G,5G,6G
GORDLEY STREET 3A,3B
GRIFFITH STREET 3F,4F,5F
GRISWOLD AVENUE 6B,5C,5D

"H"
HAGAR STREET 6C,6D,6E
HARDING AVENUE 6B,6C,6D,6E
HARPS STREET 4C,4D,4E
HAVANA AVENUE 2F
HERRICK STREET 7D,6D
HERRON STREET 3B,3C,2D,2E
HEWITT STREET 3F,4F,5F
HOLLISTER STREET 3F,4F,5F
HUBBARD AVENUE 2A,2B,2C,3C,3D,3E,4F,3G
HUNTINGTON STREET (No.) 3B,3C,3D,3E
HUNTINGTON STREET (So.) 3E,3F

"I"
IDLE STREET 6E

"J"
JACHMAN STREET 3F,3G
JESSIE STREET 3D,3E

"K"
KALISHER STREET 4E,4F,4G
KEWEN STREET 3F,4F,5F
KNOX STREET 2B,3B,4B

"L"
LASHBURN STREET 3F
LA RUE STREET 6E,6F
LAUREL CANYON 3B,4B,5B,6B
LAZARD STREET 3A,3B,3C,3D,3E,3F
LEACH STREET 3G
LENNOX STREET 6D
LIBRARY STREET 3D,4D,3D,6D
LUCAS STREET 3C,4C,3C

"M"
MACLAY AVENUE (No.) 4A,4B,4C,4D,4E
MACLAY AVENUE (So.) 4E,4F,4G
MACNEIL STREET 3B,3C,3D,3E
MEMPHIS AVENUE 2E,2F,3F
MEYER STREET (No.) 3C,3D,3E
MEYER STREET (So.) 3E,3F
MISSION BOULEVARD 4E,4F,4G
MORNINGSIDE COURT 3G
MOTT STREET 3F,4F,5F
MOUNTAIN VIEW STREET 4B

"N"
NELSON STREET 7F
NEWTON STREET 5B,6C,5D
NORA PLACE 2F
NORMA AVENUE 2D,6D

"O"
O'MALLEY STREET 6F,5F,6F
ONEIDA STREET 6F
ORANGE GROVE AVENUE 3B,3C,3D,3E
OSCEOLA STREET 2F

"P"
PARK AVENUE 5D,5E
PEARWOOD STREET 3B
PHILLIPPI AVENUE 6B
PHILLIPPI STREET 2B,3B,4B
PICO STREET 3F,4E,5E

"R"
RALSTON AVENUE 2E,3E
RAVEN STREET 2C,2D
REMICK STREET 6A
RINCON AVENUE 3A
RINCON STREET 4A,5A
ROBERTA AVENUE 2F
ROBERTA PLACE 2F,3F

"S"
SAN FERNANDO ROAD 2E,3E,4E,5E,6E
SAYRE STREET 1B,2B,2C,2D,2E
SECOND STREET 3C,4C,5C
SEVENTH STREET 3C,4C,5C
SHADOW LANE 3B
SPRUCE AVENUE 2D,6D

"T"
TAMARACK STREET 6F
TELFAIR STREET 6F
THIRD STREET 4E,5E
TRUMAN STREET 3E,4E,5E

"W"
WARREN STREET 3C,4C
WIMBERLY STREET 2F
WOLFSKILL STREET 5E,5F,5G
WOODRUFF STREET 6D
WOODWORTH PLACE 3F
WORTHINGTON STREET 3F,4F,5F
WORTHMAN STREET (No.) 4B,4C,4D,4E
WORTHMAN STREET (So.) 4E,4F,4G

"Y"
YALE STREET 6A,6B,6C,6D,6E

"Z"
YUCCA DALE AVENUE 2F
YUCCA DALE PLACE 2F

Major Land Use Recommendations
SAN FERNANDO GENERAL PLAN

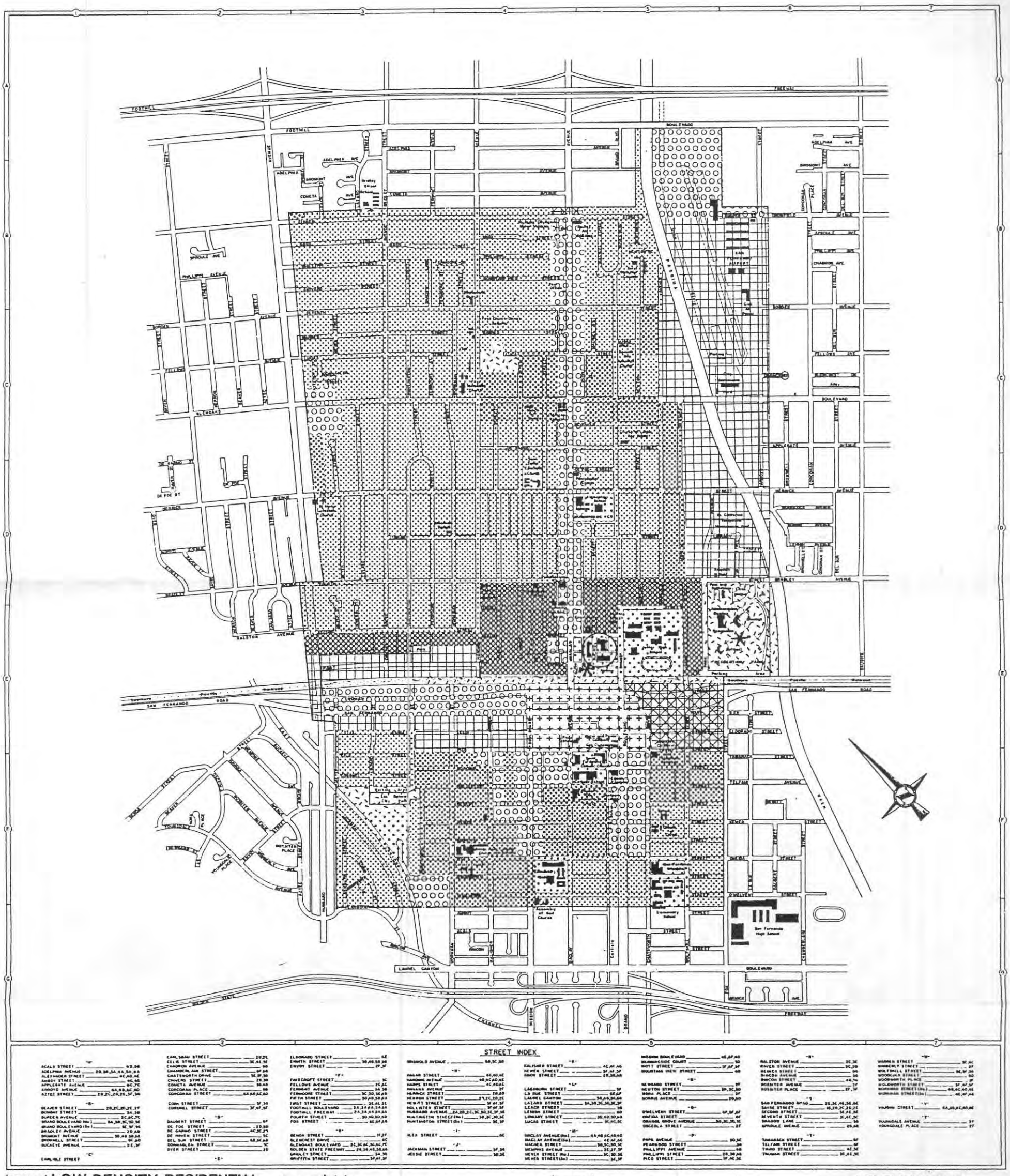
EXHIBIT IV-II

"THE MISSION CITY"

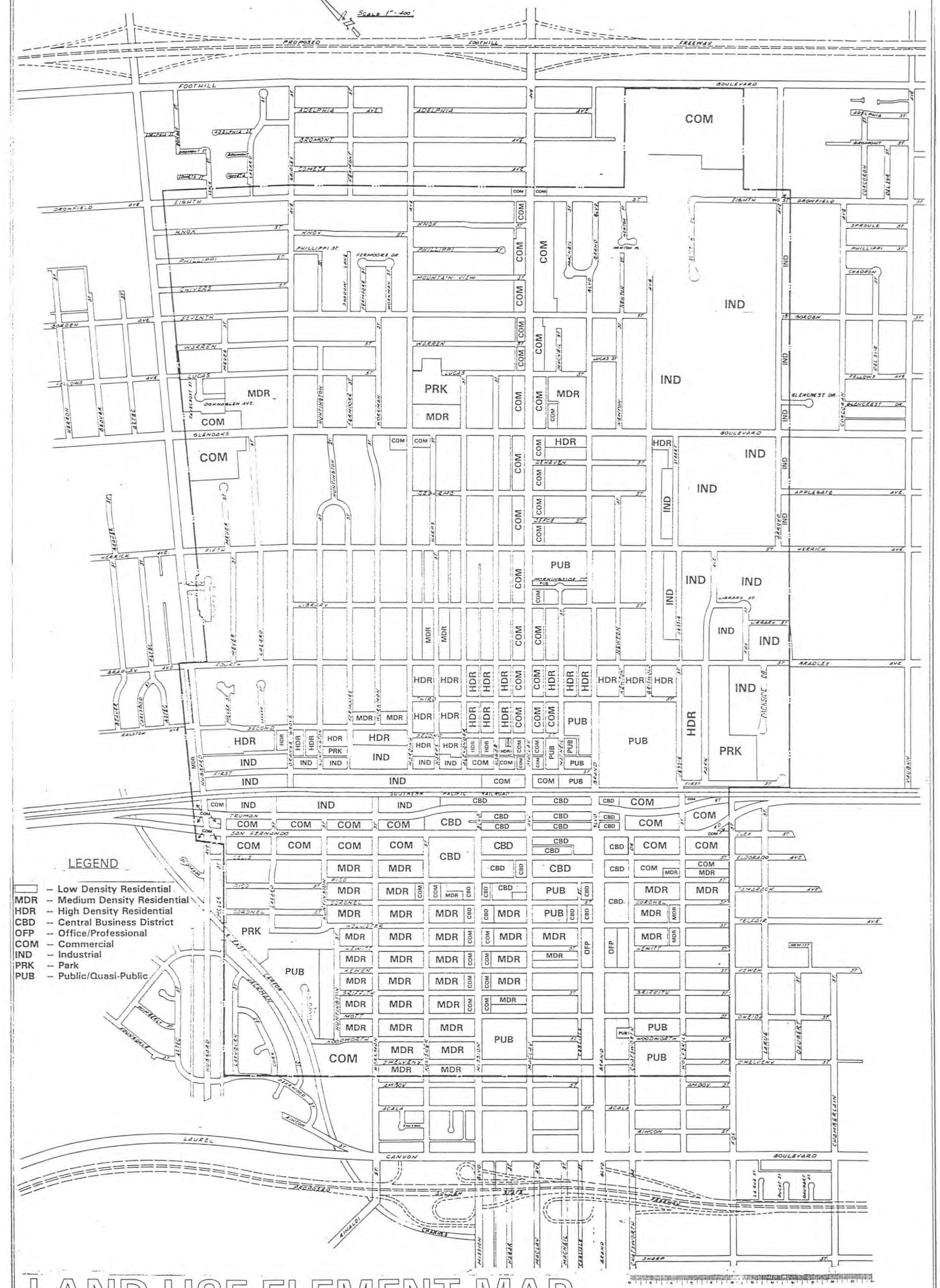
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FOOTHILL
FREEWAY
BOULEVARD
SAN FERNANDO ROAD
LAUREL CANYON
MACLAY
PACOIMA
BRADLEY AVENUE
RALSTON AVENUE
CELIS STREET
MACNEIL STREET
MAPLE STREET
MAIN STREET
ELMONTE
GLENOAKS BOULEVARD
GRIFFITH STREET
HUBBARD
HUNTINGTON STREET
JESSE STREET
LEXINGTON
LIBRARY STREET
LUCAS STREET
MAGNOLIA BOULEVARD
MISSION
NEWTON STREET
NORMAL AVENUE
OLIVE
PARKLAWN
PEARDON
PHILLIPPI
PICO STREET
POPLAR
RAYMOND
ROSCOE
SAN FERNANDO HIGH SCHOOL
SAN FERNANDO MISSION
SAN FERNANDO ROAD
SAN FERNANDO ROAD
SAN FERNANDO ROAD

MAP OF THE CITY OF SAN FERNANDO



LEGEND

- Low Density Residential
- MDR -- Medium Density Residential
- HDR -- High Density Residential
- CBD -- Central Business District
- OFP -- Office/Professional
- COM -- Commercial
- IND -- Industrial
- PRK -- Park
- PUB -- Public/Quasi-Public

LAND USE ELEMENT MAP

December 20, 1993

V.
CIRCULATION ELEMENT

V.
CIRCULATION ELEMENT

INTRODUCTION AND BACKGROUND

General Plan Legislation

The Circulation Element has been a required element of the General Plan since 1955. Section 65302 (b) of the California Government Code requires:

> A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.

During the past 20 years, transportation technology has advanced rapidly. This enhanced technology has resulted in an increased emphasis on the provision of a balanced multi-model transportation system to meet the needs of residents and businesses.

Purpose and Function

The purpose of the Circulation Element is to provide a safe and efficient transportation system for existing and proposed land uses within the community. The Element provides a basis for the orderly pattern of development while minimizing the impact of transportation services on residential neighborhoods and the environmental quality of the community.

Relationship to Other General Plan Elements

The manner in which people and goods move within and through the City is an important factor in maintaining a quality living environment. The Circulation Element must be closely coordinated with the Land Use and Housing Elements to fully utilize the resources of the community. In addition, the Circulation Element is also closely related to the Noise Element. For instance, the Circulation Element prescribes traffic volumes for the various roadways comprising the transportation network, while the Noise Element describes the baseline noise levels which are necessary to achieve noise compatible land uses. In an urban environment, aesthetic elements of a circulation system such as medians, street trees and attractive pedestrian walkways can provide passive open space and positive visual resources.

This topic is considered in the Open Space/Conservation/Parks-Recreation Elements. This 1987 Circulation Element revises and updates, as appropriate, the Element which was adopted in 1973. That Circulation Element incorporated many of the freeway improvements which were achieved during the past decade. The achievement of those improvements has resulted in less traffic through the core area of the City.

FINDINGS AND CONCLUSIONS

This section summarizes the major findings and conclusions regarding circulation services and transportation facilities available within the City of San Fernando. The principal sources of background data for preparation of this section are listed below:

- The 1973 Circulation Element of the General Plan.
- CalTrans, "1985 Traffic Volumes on California Highways."

- Traffic impact analysis studies for public and private projects.
- Citywide speed zone surveys.
- Traffic studies on coordination of railroad operations with vehicular traffic movements.
- Service data from the Southern California Rapid Transit District.

Findings

1. The local street system is comprised of major highways, secondary highways, collector and local access streets. A description of the existing arterial system is provided in Section B of the Technical Appendix. The functions of these streets are briefly described below:

   The major function of major and secondary highways is to move large volumes of traffic from one part of the City to another. On-street parking and access points along these highways to adjacent land uses are carefully considered in relationship to traffic volumes.

   Collector streets provide both land access and traffic circulation within residential neighborhoods and commercial and industrial areas. This system differs from the arterial system in that facilities on the collector system may penetrate residential neighborhoods, distributing trips from the arterials, through the area, to the ultimate destination. The collector street system moves traffic to local shopping centers, schools, parks and between adjacent neighborhoods.

   The function of the access street is to provide direct access to individual parcels. The access street is not designed for through traffic.

2. As the City of San Fernando is surrounded by freeways there is excellent freeway access. The City is served by the Golden State Freeway (I-5), the San Diego Freeway (I-405), the Foothill Freeway (I-210), and the Simi-San Fernando Freeway (State Route 118). These routes are shown in Exhibit V-1.

3. San Fernando is served by two major inter-regional bus lines, the Greyhound Bus Lines and the Continental Trailways Bus System. Both offer service from San Fernando to points lying outside the Southern California Rapid Transit District and vice versa. Both lines use the Golden State Freeway in making connections to either Los Angeles or points to the north. There is no east-west service emanating in San Fernando.

4. The City of San Fernando lies near the northern boundary of the Southern California Rapid Transit District. Through the numerous

lines that make up this system, access is provided to points as far south as Newport Beach and as far east as Yucaipa. San Fernando is served by 10 lines that make connections with other sections of the San Fernando Valley and downtown Los Angeles. These lines are described in Section B of the Technical Appendix.

5. Although the San Fernando Airport is no longer in operation, there are adequate regional facilities to provide air passenger and freight services.

6. Approximately five trains, almost exclusively freight, pass through San Fernando each day. A "Team Track" allows local dealers to ship or receive merchandise directly from parked freight cars.

7. The City is bounded by mountain ranges to the east and north and Van Norman Dam is located to the west. These areas do not generate traffic and, as a result, most through traffic from the west, north and east is generated in a relatively small area lying between the City of San Fernando and the above-mentioned geographic features.

Conclusions

1. The City of San Fernando is fully developed with well-established traffic patterns. The City's circulation system is classified according to the character of service which the street is intended to provide.

2. Street standards utilized by the City of Los Angeles are not appropriate for the City of San Fernando. Due to the geographic location of the City, arterials perform a somewhat different function in the circulation network.

3. Topographic barriers limit the area of traffic generation and there is more than average freeway access. Because of these factors, much of the traffic usually carried by arterials will use the freeway system instead. The City of San Fernando street classifications are described in Section B of the Technical Appendix.

4. There are adequate regional transportation facilities to serve the needs of the community.

ISSUES AND OPPORTUNITIES

This section outlines circulation related issues and opportunities in the City of San Fernando. The identification of these issues and opportunities serves to highlight areas

of interest that should be considered in circulation planning and decisions on traffic improvements.

Issues

1. Traffic blockages, due to railroad switching movements, can impede through traffic circulation along major arterials and can restrict the movement of emergency vehicles.

Opportunities

1. Traffic studies have been completed that provide information useful to the coordination of railroad operations with vehicular traffic movements and to improve traffic flow through the City.

2. The construction of the Foothill and Simi Valley Freeways altered traffic patterns, resulting in less through traffic within the core area of the City. Concurrently, access to other destinations of regional interest was improved for San Fernando residents and businesses.

GOALS AND OBJECTIVES

This section identifies the continuing and long-range goals and objectives of the Circulation Element. As is the case for the other General Plan Elements, the goals and objectives are based on the information summarized in the previous sections, the data contained in the Technical Appendix and the 1973 Circulation Element.

Goals

1. To provide an efficient street system which allows maximum accessibility, while providing maximum safety and economy of movement.

2. To provide a street system that links San Fernando to other communities and regional facilities, while providing the residents of those communities with easily accessible routes to various facilities within the City of San Fernando.

3. To recognize problem areas and to implement programs aimed at solving those problems.

Objectives

1. Conflicts between vehicular traffic and railway operations will be minimized to the maximum extent possible.

2. The Central Business District will be enhanced as a commercial area through the establishment of efficient circulation patterns.

3. Traffic improvements will be implemented, as needed, to respond to changes in regional traffic patterns that affect local circulation.

IMPLEMENTATION MEASURES

This section presents the policies and action programs adopted by the Planning Commission and City Council in order to achieve a circulation and transportation system that meets the needs of the community. The implementation measures are, in effect, a statement of the policies and actions which have been endorsed by the City over the recent years.

Policies

1. The street classification system should separate those streets that are designed for through traffic from those that are local in nature. The intended function should be obvious to the driver.

2. San Fernando's circulation system should be coordinated with that of the City of Los Angeles, whose standards are different. This will insure the elimination of abrupt changes in the roadway that cause confusion and congestion for the motorist.

3. The circulation system should provide continuity of movement throughout the City and should facilitate safe, efficient emergency access.

Action Programs

1. Circulation Element Map Implementation -- Exhibit V-1 is the official Circulation Element Map that indicates the street classifications for roadways in San Fernando and the regional freeway system. The goals and objectives of this map will be continually implemented and any changes will be processed as an amendment to the General Plan.

2. Inter-governmental Coordination -- On the basis of City Council policy, there is coordination with the City of Los Angeles on a

continuing basis regarding roadway transition areas between San Fernando and Los Angeles. Although each City maintains different street standards, the intergovernmental coordination serves to maximize the provision for a continuity of movement throughout the City without confusion or congestion.

3. Traffic Signalization – The City utilizes a traffic signal interconnect system which sequences traffic lights at different intersections to provide progression of traffic movement throughout the City. New state-of-the-art computerized controllers are being phased in to upgrade the system.

4. Traffic Impact Studies – To avoid adverse impacts on businesses and residential neighborhoods, the City frequently authorizes special studies on the traffic impacts stemming from the development of public and private projects. In addition, the Traffic Commission continually surveys intersections at high accident locations for purposes of recommending traffic improvements.

INTERNAL CONSISTENCY

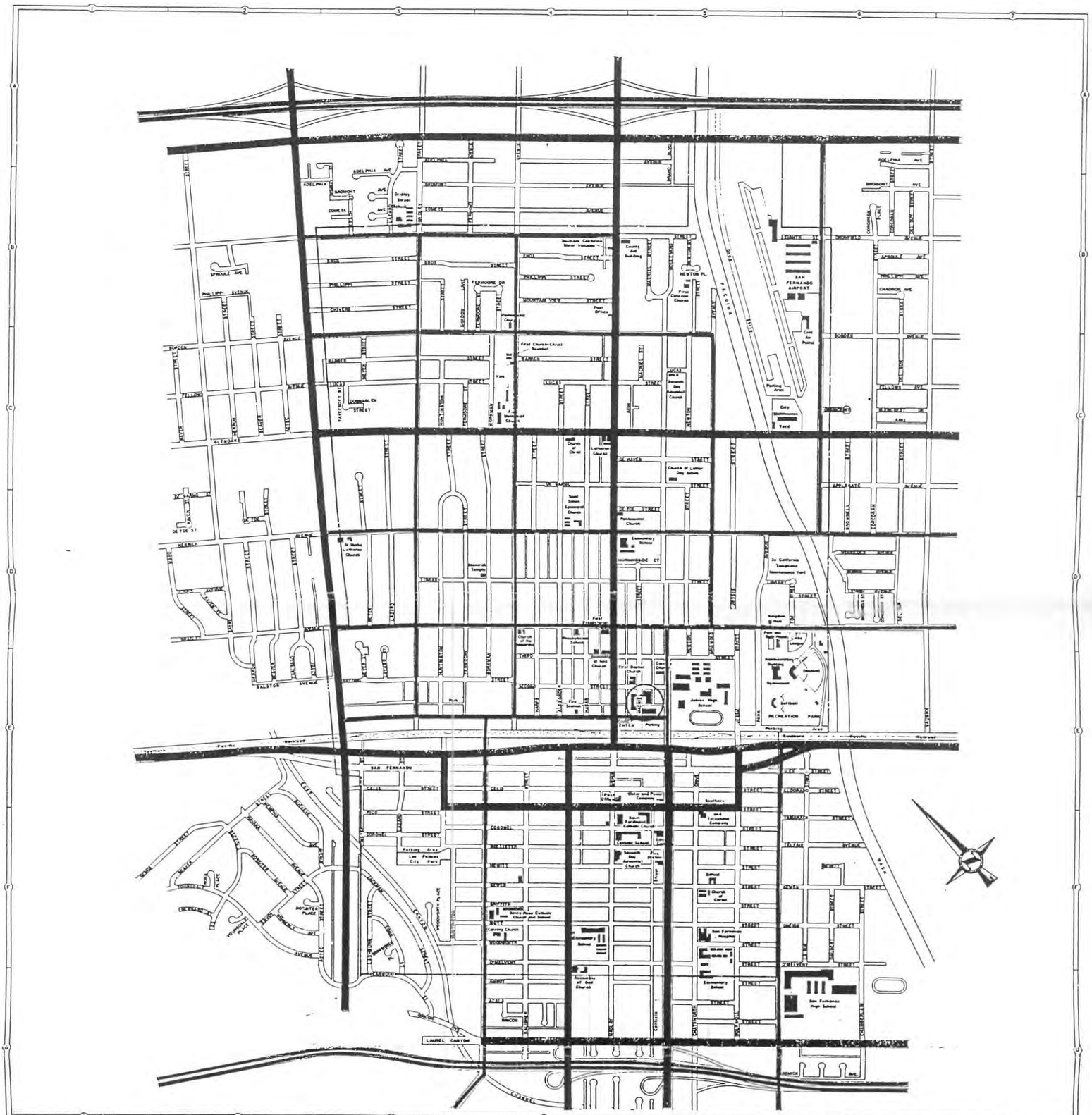
Street classifications are appropriate to serve the land use categories designated in the Land Use Element. The landscaping along major arterials provides passive open space, enhancing the visual image of the community to the motorist.

"THE MISSION CITY"

SAN FERNANDO

CALIFORNIA

INCORPORATED AUGUST 31, 1911



STREET INDEX

-A-
ACALA STREET 48,8B
ADELPHIA AVENUE 2B,3B,3A,4A,3A,4A
ALEXANDER STREET 4C,4D,4E
ARBOR STREET 4B,3G
APPLEGATE AVENUE 4C,7C
ARROYE AVENUE 8A,8B,8C,8D
AZTEC STREET 2D,2E,2D,2E,3F,3A

-B-
BLUMER STREET 2B,2C,2D,2E,3F
BOMBAY STREET 3A,3B
BORDER AVENUE 2C,4C,7C
BRAND BOULEVARD (No.) 3A,3B,3C,3D,3E
BRAND BOULEVARD (So.) 3E,3F,4E
BRADLEY AVENUE 2D,6D
BROMONT AVENUE 3B,4B,5B,6B
BRUNDELL STREET 8C,8D
BUCKEYE AVENUE 2F,3F

-C-
CARLISLE STREET 2B,3C
CELIS STREET 3E,4E,5E
CHADRON AVENUE 6B
CHAMBERLAIN STREET 6F,6G
CHATSWORTH DRIVE 1C,1F,3G
CHILDS STREET 7B,3B
COMETA AVENUE 8B,6B
CONCORDIA PLACE 6B
CONCORDIA STREET 6A,6B,6C,6D
CORK STREET 3F,3G
CORONEL STREET 3F,4F,5F

-D-
DAUBERT STREET 6F
DE FOE STREET 2D,3A
DE GARMO STREET 4C,3C,2C
DE HAVEN STREET 5C
DEL SUR STREET 8B,8C,6D
DONNABELEN STREET 5C
DYER STREET 2D

-E-
ELDORADO STREET 6E
ELMETA STREET 3B,4B,3A,4A
ENVOY STREET 2F,3F

-F-
FAIRCROFT STREET 5C
FELLOWS AVENUE 2C,3C
FERMONT AVENUE 3A,3B
FERNDONE STREET 3C,3D,3E,4B
FIFTH STREET 3D,4D,3D,4D
FIRST STREET 2E,4E,3E
FOOTHILL BOULEVARD 2A,2B,3A,4A,2A,4A
FOOTHILL FREEWAY 2A,2B,4A,2A,4A
FOURTH STREET 3D,4D,5D,6D
FOX STREET 8E,8F,8G

-G-
GENOA STREET 1F,2F
GLENCREST DRIVE 8C
GLENOAKS BOULEVARD 2C,3C,4C,5C,6C,7C
GOLDEN STATE FREEWAY 2B,3B,4B,5B,6B
GRIDLEY STREET 3A,3B
GRIFFITH STREET 3F,4F,5F

GRISWOLD AVENUE 5B,5C,5D

-H-
HAGAR STREET 4C,4D,4E
HARDING AVENUE 5D,6C,6D,6E
HARRIS STREET 4C,4D,4E
HAVASU AVENUE 2F
HAYVENHURST AVENUE 7B,8B
HERON STREET 2F,3C,2D,2E
HEWITT STREET 3F,4F,5F
HIGHLAND AVENUE 3F,4F,5F
HUNGARIAN AVENUE 2A,2B,2C,3C,3D,3C,3E,3C
HUNTINGTON STREET (No.) 5B,3C,3D,4C
HUNTINGTON STREET (So.) 3E,4E

-I-
ILEX STREET 8E

-J-
JACKMAN STREET 5F,5G
JESSIE STREET 5D,5E

-K-
KALISHER STREET 4E,4F,4G
KENES STREET 5F,4F,5F
KIRBY STREET 3A,3A,4A

-L-
LAGUNA STREET 3F
LA PAZ STREET 8E,8F
LAUREL CANYON 3A,4A,5A,6A
LAZARD STREET 3A,3B,3C,3A,3C,3F
LEADA STREET 6B
LEMON STREET 6B
LINKARY STREET 3C,4C,5C
LUCAS STREET 3C,4C,5C

-M-
MACLAY AVENUE (No.) 4A,4B,4C,4A,4C
MACLAY AVENUE (So.) 4E,4F,4G
MACNEIL STREET 5B,5C,5D,5E
MAGNOLIA AVENUE 2E,2F,3F
MEIER STREET (No.) 3C,3D,3E
MEIER STREET (So.) 3E,3F
MISSION BOULEVARD 4E,4F,4G
MORNINGSIDE COURT 5D
MOTT STREET 3F,4F,5F
MOUNTAIN VIEW STREET 4B

-N-
NEWHARD STREET 3F
NORA PLACE 3F
NORRIS AVENUE 2D,2E

-O-
OWENSMOUTH STREET 6F,6F,6F
OXFORD STREET 5F
ORANGE GROVE AVENUE 3B,3C,3D,3E
OLDEN ST. STREET 2F

-P-
PARK AVENUE 5D,5E
PEARWOOD STREET 6B
PHILLIPPI AVENUE 5D
PHILLIPPI STREET 2D,3D,4D
PICO STREET 3F,4F,5F

-R-
RALSTON AVENUE 2E,3E
RAVEN STREET 2C,2D
REMICA STREET 8B
RINCON STREET 5B
RINCON STREET 4D,5D
ROBERTSON AVENUE 2F
ROSCOE PLACE 2F,3F

-S-
SAN FERNANDO ROAD 2E,3E,4E,5E,6E
SAYRE STREET 4B,2B,3C,2D,2E
SECOND STREET 3F,4F,5F
SELVERTH STREET 3C,4C,3C
SHADOW LANE 3G
SPROULE AVENUE 2D,2E

-T-
TAMARACK STREET 6F
TELFAIR STREET 6F
THIRD STREET 4F,5F
TRUMAN STREET 3E,4E,3E

-W-
WARREN STREET 3C,4C
WINDMILL STREET 2F
WOLFSKILL STREET 8E,9F
WOODRUFF STREET 5D
WOODWORTH PLACE 3F
WOODWORTH STREET 3F,4F
WORKMAN STREET (No.) 4B,4C,4D,4E
WORKMAN STREET (So.) 4E,4F,4G

YALE STREET 8A,8B,8C,8D,8E
-Y-
YOUNGDALE AVENUE 2F
YOUNGDALE PLACE 2F

FREEWAY

MAJOR ARTERIAL

SECONDARY ARTERIAL

Circulation Element
SAN FERNANDO GENERAL PLAN

EXHIBIT V-1

RESOLUTION NO. 6307

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF SAN FERNANDO
AMENDING GENERAL PLAN AMENDMENT
GPA 1993-003 TO INCORPORATE
A MASTER BIKEWAY PLAN
INTO THE CIRCULATION ELEMENT
(GENERAL PLAN AMENDMENT NO. GPA 1993-003)

WHEREAS, the City Council identified the need for a citywide bikeway plan to encourage bicycle commuting throughout the city, and requested the Planning Commission review the Bikeway Master Plan for the establishment of bikeways and bicycle facilities; and

WHEREAS, development of a bikeway system and bicycle facilities encourages bicycle commuting as an alternative mode of transportation in compliance with state and local mandates for cleaner air and trip reduction measures; and

WHEREAS, compliance with state and local mandates requires incorporation of the Bikeway Master Plan into the general circulation element; and

WHEREAS, on December 7, 1993, the Planning Commission, following a duly noticed public hearing, at which evidence, both oral and written, was presented to and considered by said Commission, recommended to the Council that the General Plan Amendment GPA 1993-003 be amended to incorporate a Bikeway Master Plan into the general circulation element as set forth in Planning Commission Resolution No. 1097; and

WHEREAS, on December 20, 1993, the City Council held a duly noticed hearing to consider whether to amend GPA 1993-003. Evidence, both oral and written, was duly presented to and considered by the Council as said hearing.

THE CITY COUNCIL OF THE CITY OF SAN FERNANDO HEREBY FINDS, RESOLVES AND ORDERS AS FOLLOWS:

SECTION 1: Although no convenient bikeways currently exist throughout the City, a Class I bikeway is planned to be built along the Metrolink Corridor within the City limits.

SECTION 2: Applications for matching fund grants through programs such as the Bicycle Lane Accounts program require incorporation of a Bikeway Master Plan into the City's general circulation element. These programs offer funds to jurisdictions wanting to develop bicycle programs to encourage bicycle commuting as an alternative mode of transportation.

SECTION 3: State and local air quality regulations recommend jurisdictions implement trip reduction measures to reduce automobile emissions, a major source of air pollution in Southern California. Bikeway routes and bicyclist facilities outlined in the Bikeway Master Plan were drafted with the intention to comply with these regulations.

SECTION 4: Pursuant to CEQA Guidelines Section 15063, an Initial Study has been prepared for this project. After reviewing the Initial Study, the proposed Negative Declaration, and all comments received during the public review process, the City Council has determined that the project will not have a significant impact upon the environment. As a result of its review of the aforementioned documents, the City Council hereby approves the Negative Declaration and authorizes the Community Development Director to issue a Notice of Determination pursuant to CEQA Guidelines Section 15075.

Pursuant to Title 14, California Code of Regulations, Section 753.5(c) (1), the City Council has determined that, after considering the record as a whole, there is no evidence that the proposed project will have the potential for any adverse affect on wildlife resources or the habitat upon which the wildlife depends. Furthermore, on the basis of substantial evidence, the City Council hereby determines that any presumption of adverse impact has adequately been rebutted, and therefore, pursuant to Fish and Game Code Section 711.2 and Title 14, California Code of Regulations Section 753.5(a)(3), the project is not required to pay Fish and Game Department filing fees.

SECTION 5: The City Council therefore approves the general plan amendment GPA 1993-03 incorporating the Bikeway Master Plan into the General Circulation Element, as described in Exhibit "A" attached hereto and made a part hereof.

SECTION 6: The City Clerk shall endorse the amended general plan GPA 1993-03 incorporating the Bikeway Master Plan Circulation Element

PASSED, APPROVED AND ADOPTED this 20th day of December, 1993

MAYOR

CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss
CITY OF SAN FERNANDO)

I, MARY STRENN, City Clerk of the City of San Fernando, do hereby certify that the foregoing Resolution No. 6307 was duly adopted by the City council and signed by the Mayor of said City as a meeting held on the 20th day of December, 1993; and that the same was passed by the following vote, to wit:

AYES: Acuna, Hernandez, Chacon, Ojeda, Wysbeek - 5

NOES: None - 0

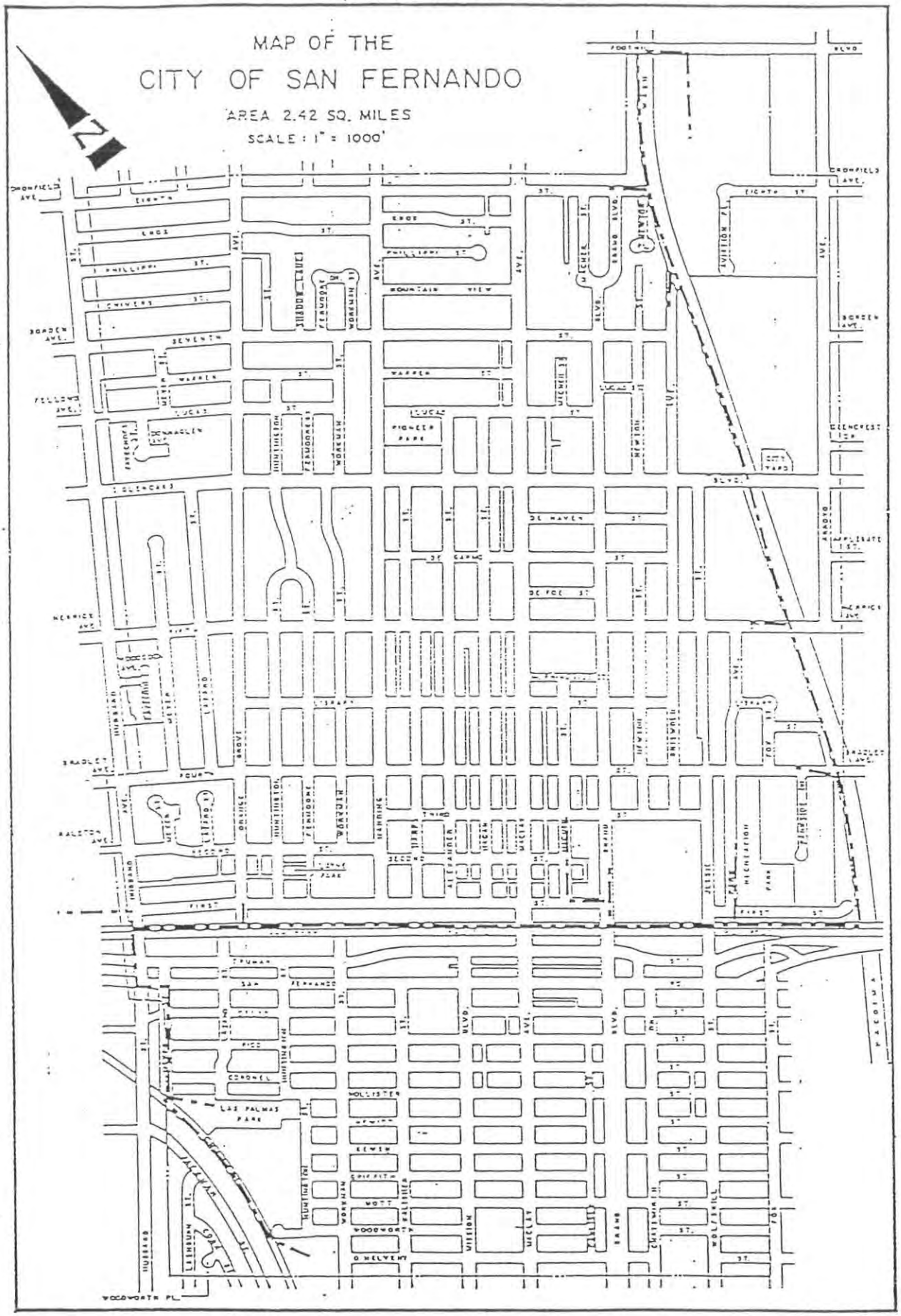
ABSENT: None - 0

ABSTAIN: None - 0

CITY CLERK

CC-224.PW

EXHIBIT "A"
(GPA 1993-03)



SAN FERNANDO BIKEWAY

VI.
HOUSING ELEMENT

VI.
HOUSING ELEMENT

INTRODUCTION AND BACKGROUND

AB 2853 (Ross Bill) established extensive requirements for the Housing Element of the General Plan, which are generally outlined in California Government Code Section 65583:

> "The housing element shall consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives and scheduled programs for the preservation, improvement and development of housing. The housing element shall identify adequate sites for housing, including rental housing, factory-built housing and mobilehomes and shall make adequate provision for the existing and projected needs of all economic segments of the community."

Pursuant to the authority granted by AB 2853, the California Legislature prepared guidelines for the adoption of a housing element and required that all elements adopted after October 1, 1981 be prepared in compliance with the Roos Bill.

The purpose of the Housing Element is to address on a practical level, the development of a comprehensive problem-solving strategy and implementation program responsive to the needs of the San Fernando community. As the major local housing strategy document, the San Fernando Housing Element is intended to provide all

concerned citizens and public officials with a knowledge of housing needs and to set forth an integrated set of policies and programs aimed at the attainment of expressed goals. In doing so, the Housing Element will serve to provide guidance in matters relating to housing and will also promote closer coordination of City, State and Federal housing policies and programs.

The San Fernando Housing Element is prepared in accordance with the requirements as set forth in Article 10.6 of the State of California Planning and Zoning Law. These regulations define specific areas of concern and need in the community, to be addressed as indicated below and on the following page.

> An assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs.
>
> A statement of the community's goals, quantified objectives and policies relative to the maintenance, improvement and development of housing.
>
> A program which sets forth a five-year schedule of actions the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the housing element through the administration of land use and development controls, provision of regulatory concessions and incentives and the utilization of appropriate Federal and State financing and subsidy programs when available.

FINDINGS AND CONCLUSIONS

As approximately 18.5% of the City's housing was constructed prior to 1940, a significant portion of the housing stock has exceeded or is nearing the 45-year life expectancy. This pre-1940 housing stock requires a great deal of attention. No matter how conscientiously a unit is maintained, it is a fact that housing wears out over time.

A total of 359 units, or approximately 6.5% of the City's total housing stock, is in need of minor or major repair to the roof, walls, foundation and/or premises. Major wall repairs (to walls, windows and/or porches) are required in 104 cases, major roof repairs in 115 instances, and major foundation repairs in 35 cases. All of these units would economically warrant rehabilitation. However, eight units are not suitable for rehabilitation.

III-3

The 1983 RHAM estimated that in April, 1980, 1,101 households in the City (20% of its total) were considered "in need". A household in need is defined as a lower income household (a household whose income is 80% or less of the County's median income, with adjustment for household size) paying over 30% of its income for housing. Approximately 72.5% of those lower income households identified as overpaying for housing are renters.

The City maintains membership in the Housing Authority of the County of Los Angeles, which administers the Section 8 Housing Assistance Payments Program. This program presently aids 81 lower-income households in the City, including 69 elderly (7 of which are handicapped) and 12 small family households, by paying the difference between 30% of an eligible household's income and the actual cost of renting a unit.

According to the 1983 RHAM model, 144 housing units would need to be added by January 1, 1988 to the City's January 1, 1983 total households (estimated at 5,472) to fulfill the City's share of regional housing needs and attain a 5% vacancy rate. Based on historical building activity trends, it is expected that the City's annual average allocation of 29 units can readily be provided for. Since new market rate housing is currently being sold in the City for around $100,000, which would require an income above 120% of County median income, the City's housing efforts should be directed at meeting the needs of Very Low, Low and Moderate Income households.

The cost of housing in San Fernando is one of its most important problems. The rapid increase of property values and housing costs which now characterizes most of southern California is the result of a number of factors, including interest rates, costs of materials, land and labor, speculation and a wide-spread demand for housing in combination with a limited supply of new units. However, the City's 1980 median housing value of $68,700 was substantially lower than the County's $87,400 median value and the State's $84,500 figure. Similarly, the City's 1980 median contract rent of $228 also fell below County and State levels. Therefore, the City's housing stock is affordable to a much greater range of income levels.

The number and size of vacant sites available for residential development in the City are extremely limited. Buildout of the 39 vacant parcels presently zoned R-1, R-2 or R-3 would add only 102 units to the City's housing inventory (24 units each in the R-1 and R-2 Zones and 54 units in the R-3 Zone). These sites, which total approximately 6.8 acres, are

scattered throughout the City's residential areas and range in size from 2,500 to 22,000 square feet.

The greatest potential increase in dwelling units could occur in the "underdeveloped areas" of the City rather than through the development of vacant sites. Much of the City's R-2 and R-3 zoned property is presently occupied by single-family dwellings. Replacement of these units with multi-family development could yield at least an additional 1,200 units--490 units in the 6-17 units per acre density range and 717 in the 17-43 units per acre category. This yield could be higher if lot consolidation occurs.

Prevailing nongovernmental constraints include the cost of land, construction, and financing. First time homebuyers face the greatest difficulty in acquiring affordable ownership housing, due to insufficient assets, monthly income and/or an inability to qualify for a loan.

Development standards related to minimum lot size, setbacks, height, lot coverage and parking are applied to new residential construction through the City's zoning ordinance. These standards are consistent with those of other local jurisdictions and accepted planning practices. They are viewed as necessary to protect the public health, safety and welfare and maintain the quality of life, and are, therefore, not considered constraints on the development of housing.

ISSUES AND OPPORTUNITIES

Housing needs in San Fernando, as in other southern California communities, exceed the City's capacity to fully address them. There are land supply constraints and limited amounts of funding resources available from the State and Federal governments. The following is a summary list of issues and opportunities which is drawn from the detailed background information contained in Section B of the Technical Appendix.

1. The average household size in the City of San Fernando increased from 3.02 in 1970 ot 3.27 in 1980. This contrasts with household density changes throughout Los Angeles County, which declined rather than increased.

2. Hispanic families are overrepresented in the lower income categories and underrepresented in the upper income categories when compared to the City-wide income distribution.

3. San Fernando is an established, nearly built-out urban area, with very little growth in terms of dwelling units occurring over the last 20 years.

4. Single-family units continue to be the prevalent type of housing, comprising approximately 76% of the housing stock. However, building permits issued over recent years show a trend toward higher density developments (condominimums, townhouses).

5. The 1980 Census reported a City vacancy rate of 2.2% for rental housing and .9% for ownership housing, both of which are significantly below the ideal 5% vacancy rate.

6. The number of housing units greater than 45 years old will grow substantially in the next ten years. The City is implementing several programs in the area of conservation and rehabilitation.

GOALS AND OBJECTIVES

Goals

The City of San Fernando has adopted the following three goals for its housing program, which are consistent with State housing policies:

1. The provision of decent housing in a satisfying environment for all persons regardless of age, race, sex, marital status, ethnic background, source of income or other arbitrary factors.

2. The provision of housing selection by location, type, price and tenure.

3. The development of a balanced residential environment with access to employment opportunities, community facilities and adequate services.

Objectives

1. The rehabilitation of 50 housing units with substandard conditions during the next five years.

2. The construction of at least 100 new housing units over the next five years.

IMPLEMENTATION MEASURES

Policies

1. Promote the rehabilitation of substandard and deteriorating housing.

2. Encourage the maintenance and repair of existing housing to prevent deterioration of housing in the City.

3. Promote efforts to remove substandard units which cannot be rehabilitated.

4. Develop property maintenance controls and/or programs designed to encourage proper levels of property upkeep.

5. Fulfill the City's share of regional housing needs to the maximum feasible extent.

6. Maintain the supply of affordable housing within the City in same condition.

7. Locate residential uses in proximity to commercial areas and transportation routes for accessibility to services.

8. Provide adequate infrastructure to accommodate future residential development.

9. Promote a housing stock that varies sufficiently in cost and type to meet the economic and social needs of its residents.

10. Use available funding to subsidize low- and moderate-income housing.

11. Discourage the conversions of apartment units to condominiums where such conversions will diminish the supply of low- and moderate-income rental housing.

12. Ensure a continuing supply of affordable housing.

13. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color or physical handicap.

14. Take positive steps to assure that all segments of the population are aware of their rights and responsibilities regarding fair housing.

15. Ensure that fair housing practices are applied to all housing offered within the City.

IMPLEMENTATION PROGRAMS

The City has developed a number of housing policies and programs to be implemented over the next five years. The policies and programs are organized around five issues that are identified by the State as important priorities in addressing local housing problems. These issue areas are:

- Preserving Housing and Neighborhoods
- Preserving Affordability
- Standards and Plans for Adequate Sites
- Promoting Equal Opportunity
- Housing Assistance

The action programs are described in the Chart VI-1. Each program action is described in terms of the following:

- Program Category
- Program Description
- Quantitative Objective
- Funding
- Responsible Agency
- Consistency with Community Goals

CITY OF SAN FERNANDO — HOUSING PROGRAM DESCRIPTION
1985-1990

Program Category	Program Description	Quantitative Objective	Funding	Responsible Agency	Consistency with Community Goals
Conserve and improve existing housing.					
1. Structural conservation and rehabilitation.	Annually update 1982 housing survey.	Maintain an accurate assessment of units in need of rehabilitation.	Planning Department Budget	San Fernando Planning Department	Promote the rehabilitation of substandard and deteriorating housing.
	Continue administering rehabilitation programs.	Rehabilitation and improvement of areas where deterioration is not severe.	CDBG Funds, Department Budget	San Fernando Planning Department	Encourage the maintenance and repair of existing housing to prevent deterioration.
	Continue Building Code enforcement program.	Process 90 code violations per year	CDBG Funds, Department Budget	San Fernando Building Department	Develop programs to encourage proper levels of property upkeep.
	Pursue participation in the Section 8 Moderate Rehabilitation Program.	Conservation of rental housing stock and provision of rental subsides.	Section 8 Program	San Fernando City Administrator's Office City Council.	To preserve housing and neighborhoods.
	Use redevelopment tax increment to improve housing stock.	Continued funding of housing rehabilitation program.	Redevelopment Tax Increament.	San Fernando Planning Dept. City Council, City Administrator's Office.	To provide decent housing for all persons.

Program Category	Program Description	Quantitative Objective	Funding	Responsible Agency	Consistency with Community Goals
2. Preserving Affordability	Section 8 program.	Maintenance of affordable rental housing with a goal of 3 additional units per year.	Department Budgets	San Fernando Planning Dept., City Administrator's Office.	Use available funding to subsidize low and moderate income housing.
	Prepare a Condominimum Conversion Ordinance.	Limitation of conversion of rental housing stock that would diminish the supply of low and moderate income housing.	Department Budget	San Fernando Planning Dept., City Attorney	Discourage conversion of apartment units to condominimum where such converisons will diminish the supply of affordable housing.
	Require development agreements to establish standards for affordable housing units where a density bonus has been granted.	Increase number of affordable housing units.	Provided by Developer		Ensure a continuting supply of affordable housing.
3. Provision of Adequate Housing Sites.	Establish criteria for the location of low and moderate income housing.	Compliance with State and Federal criteria.	Department Budget	San Fernando Planning Dept.	

Program Category	Program Description	Quantitative Objective	Funding	Responsible Agency	Consistency with Community Goals
	Review planned land uses for compatibility with General Plan.	Assure adequate levels of community facilities and services.	Department Budget	San Fernando Planning Dept.	
	Amend R-1 zoning to allow manufactured housing on permanent foundations.	Increase the availiability of sites for lower cost housing.	Department Budget	San Fernando Planning Dept., Planning Commission, City Council.	
	Amend R-1 zoning to permit the construction of second units on lots with existing single-family residences.	Increase the availibility of affordable rental units.	Department Budget	San Fernando Planning Dept., Planning Commission, City Council	
	Amend the zoning Ordinance to prohibit the sale or development of substandard lots under the same ownership.	Elimination of non-conforming lots.		San Fernando Planning Commission, City Council	
	Develop Residential Planned Development zone.	Lower housing costs due to design flexibility.		San Fernando Planning Dept., Planning Commission, City Council.	

Program Category	Program Description	Quantitative Objectives	Funding	Responsible Agency	with Community Goals
4. Promoting Equal Opportunity	Annually update city-wide survey of rental housing suitable for handicapped, elderly, and large family households.	Assist identified special needs groups in locating housing.	Department Budget	San Fernando Planning Dept.	
	Continue City's Fair Housing Program.	Fair housing practices.	Department Budget	San Fernando Planning Dept.	
	Designate a percentage of redevelopement tax increasment and residential mortgage revenue bond monies for meeting special needs.	Assist special groups in obtaining funding for rehabilitation or new residential development.	AB 1355, Marks-Toran, SB99, Section 8 Rehabilitation Funds, Redevelop-ment Tax Increas-ment.	City Administrator's Offices	
	Establish a service to match seniors who desire to share existing housing.	Increase affordable housing for seniors and reduce housing costs for senior homeowners.	Department Budget	San Fernando Planning Dept.	

Program Category	Program Description	Quantitative Objective	Funding	Responsible Agency	Consistency with Community Goals
5. Housing Assistance	Maintain membership in Los Angeles County Housing Authority.	Contained participation in Section 8 programs.	Department Budget	San Fernando City Council, City Administrator's Office.	
	Modify development standards and/or reduce fees for projects with affordable and/or elderly housing.	Encouragement of affordable and elderly housing.	CDBG funds, Redevelopment Tax Increment Department Budget.	San Fernando Planning Dept., Planning Commission City Council	
	Apply for Urban Counties Community Development Block Grant funds, when eligable.	Funds for rehabilitation and housing assistance, beginning in 1986.	Department Budget	San Fernando City Administrator's Office	
	Apply for Small Cities Community Development Block Grant program.	Funds for City's housing program.	Department Budget	San Fernando City Administrator's Office	
	Develop a home energy conservation program.	Reduced housing costs.	Department Budget	San Fernando Building and Planning Dept., Public Utilities.	

Program Category	Program Description	Quantitative Objective	Funding	Responsible Agency	Consistency with Community Goals
	Issue tax-exempt mortgage revenue bonds.	Expand affordable and market rate housing opportunities.	AB 1355, Marks-Toran, SB 99	San Fernando City Council, City Administrator's Office	
	Support non-profit organizations that may sponser affordable housing proposals.	Expansion of funding opportunities for affordable housing.	Department Budget	San Fernando City Council, City Administrator's Office	
	Use a portion of redevelopment tax increment to increase the supply of low and moderate-income housing.	Encourage affordable housing through incentives such as fee waivers and land write-downs.	Redevelopment Tax Increment	San Fernando City Council, City Administrator's Office	
	Reduce processing time for projects with affordable or elderly housing.	Encourage construction of affordable and elderly housing.	Department Budget	San Fernando Planning Dept., Planning Commission, City Council	
	Annual review of City-owned property that could be considered as surplus.	Potential affordable housing site.	General Funds	San Fernando Public Works Department City Council	

VII.
OPEN SPACE/CONSERVATION/PARKS-RECREATION ELEMENT

VII.
OPEN SPACE/CONSERVATION/PARKS-RECREATION ELEMENT

INTRODUCTION AND BACKGROUND

General Plan Legislation

The General Plan statutes established requirements for Open Space and Conservation Elements in 1970. According to Section 65560(b) of the Government Code, "open space" is any parcel or area of land or water which is essentially unimproved and devoted to open space use. "A conservation element," according to Section 65302(f) of the Government Code, is "for the conservation, development, and utilization of natural resources."

Assembly Bill No. 2038, which was approved in September 1984, enables communities to deal with issues of local concern or interest in the general plan as indicated by the following statement:

> "The general plan may include any other elements or address any other subjects which, in the judgement of the legislative body, relate to the physical development of the city." (Section 65303)

Under these provisions, optional elements may be prepared to suit community needs. Because of the City's interest in parks and recreation, this topic is incorporated in this element of the General Plan.

Purpose and Function

The purpose of the Open Space Element is to designate, as appropriate, open space land for the following purposes:

- Open space for the preservation of natural resources such as animal and plant life and ecological areas.
- Open space for the managed production of resources such as agricultural land areas or major mineral deposits.
- Open space for outdoor recreation such as areas particularly suited for park and recreation purposes.
- Open space for public health and safety such as areas which require special management or regulation because of hazardous conditions including earthquake fault zones and unstable soil areas.

The purpose of the Conservation Element is to establish policy guidelines (as needed) for the conservation, development and utilization of economically productive natural resources such as timber, water, agricultural land, minerals, fish, wildlife and rare or endangered species. In many urban-suburban communities such as San Fernando there are few natural resources that merit long-range conservation.

Local parks, school playgrounds and other accessible neighborhood parks are a major open space resource and valuable contribution to meeting the community's recreation needs. The analysis of these resources falls within the meaning of "open space for outdoor recreation." In addition, the inventory of current resources includes the wide range of sports, cultural and public service programs furnished by the City.

Relation to Other General Plan Elements

This 1987 Open Space/Conservation/Parks-Recreation Element revises and amends the previous "Open Space Element" of the City which is dated May 1973 and which was

adopted by the Planning Commission and City Council in mid-year 1973. In addition, the City's original General Plan includes a discussion of park and recreation needs and resources in the Land Use Element and the Public Facilities Element. This Element updates, as appropriate, the material included in those two Elements of San Fernando's original General Plan.

These three elements are combined into a single element because there would be an overlap and duplication in terms of the data and issues which would be addressed if the elements were presented individually. "Natural resources," for instance, is a subject that is included in both the Open Space and Conservation Elements. Moreover, "open space for outdoor recreation" incorporates the topics usually discussed in a parks and recreation element. Finally, the land which is designated as open space by this element also is included in the "open space" category of the text and map of the Land Use Element.

FINDINGS AND CONCLUSIONS

This section is a summary of the principal findings and conclusions pertaining to existing conditions and future trends affecting open space, conservation and parks and recreation resources. The findings and conclusions are presented in a manner consistent with the General Plan statutes and the advisory guidelines offered by the State Office of Planning and Research. The primary sources of background data for preparation of this section are listed below:

- The 1973 Land Use, Public Facilities and Open Space Elements of the General Plan.
- Inventory of recreation programs provided by the City for its residents.
- Field survey of neighborhood parks located in San Fernando.
- City of Los Angeles Recreation and Parks Department, "Valley Region Parks Inventory."
- 1985 Study for Proposed Senior Citizen Center.

Section D of the Technical Appendix includes an inventory of City parks, school playground and open space resources as well as other neighborhood and regional

parks that are accessible to San Fernando residents. In addition, two charts are contained in Section D of the Technical Appendix. The first chart is a summary of the recreational facilities that are located in each park and school located within or adjacent to San Fernando. The second chart presents a complete summary of the sports, cultural and public service programs offered by the City's Park and Recreation Department.

Findings

1. Urbanization and the compact size of San Fernando precludes the presence of ecologically important natural areas containing significant plant or animal life.

2. Commercially productive timber, water, mineral or agricultural resources are not located within the City limits.

3. The City presently has 24.7 acres of developed lands in four parks ranging in size from .9 acres to 15.5 acres and another 19 acres in four public school facilities (see Exhibit VII-1).

4. Other parks that are particularly accessible to San Fernando's residents include two Los Angeles City Parks which are the 19-acre Brand Park located opposite the San Fernando Mission and the 18-acre Paxton Park located at Paxton Street and Laurel Canyon Boulevard.

5. Hansen Dam Recreational Area, a 1,437 acre facility, is the major regional resource that is located near the San Fernando community. This facility is located adjacent to Glenoaks Boulevard.

6. The preservation of open space land for public health and safety is not possible since the City is almost fully developed. Building and development near the San Fernando Fault Zone should be controlled by means of the Alquist-Priolo Special Studies for Fault Hazards (as explained more completely in the Safety Element).

7. Water is supplied to San Fernando by a system of wells within the City. The groundwater elevations range from 660 to 1060 feet and the groundwater table is generally in excess of 75 feet. Following the 1971 earthquake, which caused extensive damage to the City's water well system, a permanent connection to the Metropolitan Water District was constructed.

8. The repairs to the water well system, subsequent to the earthquake, plus the MWD water connection provide the City of San Fernando with a continuing water supply capable of meeting both daily demands and emergency situations. There are no fire

flow deficiencies in any portion of the City, according to the standards established by the Fire Department.

9. There are no forest resources within the City of San Fernando.

10. San Fernando is a fully urbanized area with no prime agricultural soils located within its incorporated boundaries.

11. The Land Use Element does not designate any land for agricultural production.

12. The City does not contain any mineral resources.

13. Native vegetation and wildlife have been disrupted by urbanization. Only urban adaptable species remain in the area such as squirrels, mice, skunks and feral cats. The most commonly observed birds in urban areas are crows, starlings, house finches, house sparrows, spotted doves and Brewer's blackbirds.

14. No rare or endangered species of plants or animals are known to exist in the City of San Fernando.

Conclusions

1. Open space for the managed production of resources and for the preservation of natural resources are not issues pertinent to the City of San Fernando.

2. Open space for public health and safety cannot be provided because the City is already fully developed. Safety from seismic hazards must be provided through engineering design.

3. Residents of the community currently enjoy a ratio of 1.3 acres of developed City park acreage per 1000 persons. This ratio is enhanced to 2.3 acres per 1000 residents when the space available at the school playgrounds is included in the total inventory.

4. As the City is 92% developed, vacant land in large parcels is unavailable for acquisition for open space and recreational uses.

5. Because of the highly developed nature of the community, it is important to preserve, enhance and add land to existing open space and recreational areas when practical.

6. City park programs have high attendance from all age groups within the community. Soccer is the most popular team sport in the City.

ISSUES AND OPPORTUNITIES

This section identifies issues and opportunities pertaining to open space, conservation and parks and recreation as they affect the preparation of plans and programs in the future. The identification of these issues and opportunities is especially useful to the formulation of recommendations concerning goals and objectives as well as implementation measures.

Issues

1. Even if suitable or appropriate sites were available, it is unlikely that the City will have the economic means to purchase large properties for open space, park and recreation purposes.

2. There is a need for additional playing fields, particularly to accommodate the high demand for youth and adult participation in soccer. Because the demand for playing fields exceeds the capacity of existing facilities, there are waiting lists for soccer and softball. There are presently no available properties of sufficient size for development as teams sports facilities.

3. There are approximately 2,500 senior citizens residing in the City of San Fernando which represents 14% of the total population. A centralized facility is needed in order to provide additional senior services.

4. Retired adults are often limited in their ability to engage in recreational activities due to financial constraints and lack of mobility. Accessible passive open areas are often needed to serve this population segment.

5. Visual enhancement of the community is needed such as the provision of landscaping along major traffic corridors and in public places.

Opportunities

1. The acquisition of land adjacent to existing parks, as it becomes available, would greatly enhance open space, park and recreational opportunities within the City.

2. Small parcels of vacant land are the greatest potential for the provision of additional open space and park areas without causing a need for relocation. Such vacant parcels could be developed as mini-parks.

3. The lease or sale of the undeveloped portion of Recreation Park could provide funds for the acquisition of new parkland or for park improvements.

4. The City is planning to construct a senior citizen facility consisting of 3,600 square feet at Recreation Park which would provide the opportunity to contribute to meeting a variety of human needs.

5. The San Fernando Airport, located at Foothill Boulevard and Arroyo Street, is being redeveloped. Specific planning for the development of this site could include perimeter landscaping to enhance the visual character of the community. Trees, berming and ornamental landscaping can provide passive open space for viewing in highly urbanized areas.

GOALS AND OBJECTIVES

This section establishes continuing and long-range goals and objectives of the Open Space/Conservation/Parks-Recreation Element. The goals and objectives reflect the information pertaining to findings and conclusions as well as the identified issues and opportunities. The goals and objectives also are recommended in light of the 1973 Open Space Element and current practices of the Parks and Recreation Department.

Goals

1. To provide the fullest amount possible of open land for parks and recreational purposes and for the passive and visual enjoyment of the community residents.

2. To give aesthetic variety and distinction to the community by adding relief to developed areas through the conservation of existing and the development of new landscaping particularly along the urban corridors.

3. To provide a complete range of recreational, cultural and sports programs to meet the diverse needs of the community's population.

Objectives

1. It is the City's intent to provide a balanced distribution of parks that will encourage park patronage by all the population groups of the community.

2. Additional mini-parks should be developed, where feasible, to make open space and recreation areas more accessible to the elderly and to small children.

3. It is the City's intent to provide a central facility to conduct senior citizen activities, programs and services.

IMPLEMENTATION MEASURES

This section presents the policies and action programs adopted by the Planning Commission and City Council. These implementation measures are intended to convey to the community-at-large the concrete steps which the City will continue to take or initiate for purposes of contributing to the meeting of basic human needs for open space and recreational opportunities.

Policies

1. The policy of annexing open space land adjacent to existing park development, when feasible, will be continued in the future.

2. Federal, State and Community Development Block Grant funding programs that could be utilized for land acquisition and park development will be continually explored in terms of meeting San Fernando's needs.

3. The City will explore the possibility of selling or leasing the undeveloped portion of Recreation Park (which is not useable) for purposes of gaining resources to address additional open space, park and recreational needs.

Programs

1. Open Space Preservation -- Existing facilities that provide open space and recreation are preserved for future users by the Land Use Element and Zoning Ordinance. All parks and open space resources that are under public ownership are designated as open space by the Land Use Element of the General Plan. The text that defines this land use category prohibits the development of such land for urban and/or commercial uses. Sites that are designated as "Open Space" are further protected by the zoning which is applied to such land and which is consistent with the intent and purpose of the open space category.

2. Parks and Recreation Program -- This program is operated by the City's Park and Recreation Department under the guidance provided by the Parks and Recreation Commission, Planning Commission and City Council. A description of each park facility and the programs and services under the administration of the Parks and Recreation Department is provided in Section D of the Technical Appendix.

3. Senior Citizens Center Facility -- A grant application has been approved by the County Area Agency for the Senior Citizen Bond Act Funds. The funding will be used to finance the construction of the proposed senior center (3,600 square feet) at Recreation Park.

INTERNAL CONSISTENCY

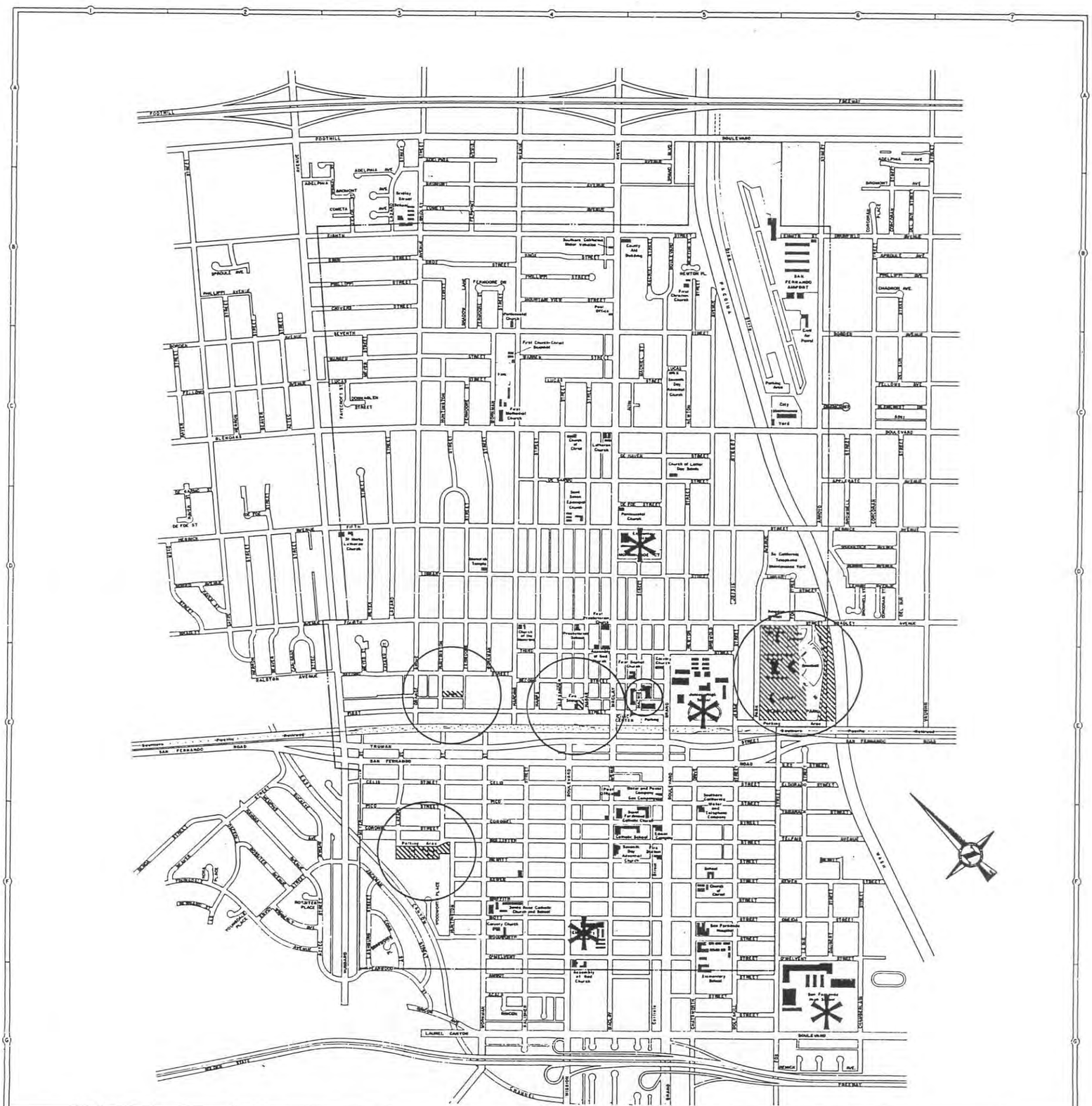
The Open Space/Conservation/Parks-Recreation Element is consistent with the areas designated as Open Space in the Land Use Element. The Land Use Element contains an "open space" category intended to preserve and protect open space areas under public ownership. Open space areas for public health and safety are not designated in the Safety Element or Land Use Element, as the City is fully developed.

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PARK

SCHOOL

Parks and School Recreation Areas
SAN FERNANDO GENERAL PLAN

EXHIBIT VII-I

VIII.
SAFETY ELEMENT

VIII.
SAFETY ELEMENT

INTRODUCTION AND BACKGROUND

General Plan Legislation

In the past 15 years, three legislative acts have enumerated how localities are to address in community general plans the conditions that are hazardous to public health and safety. In 1970, the Safety Element became a mandatory element of the General Plan. The provision for a Safety Element was partly a reaction to damaging wildland fires that occurred in September and October of 1970. Following the local San Fernando earthquake in 1971, the State Legislature enacted legislation requiring counties and cities to adopt a Seismic Safety Element as part of the comprehensive General Plan. In 1984, there were revisions in General Plan legislation pertaining to these two elements. The Seismic Safety and Safety Elements were combined into a single element that would contain essentially the same information previously included in the two elements.

According to Section 65302(g) of the Government Code, the safety element is described in the following terms:

"A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards known to the legislative body; flooding; and wildland and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peak load water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards."

Purpose and Function

This element contains information on hazardous conditions that may affect the resident and working population of San Fernando. Information is presented in this element on the conditions listed below and on the next page.

- Seismically induced hazards such as surface rupture, ground shaking, ground failure and dam failure
- Subsidence and other geologic hazards
- Mudslides and landslides
- Flooding
- Urban fires
- Hazardous waste

Relation to Other General Plan Elements

Some community safety concerns overlap or are associated with the issues considered by the open space and land use elements. According to Government Code Section 65560 b(4), the safety element is linked to the implementation of a local open space plan. For instance, as a means of protecting public health and safety, open space land may be set-aside for these purposes in circumstances that need special regulation and management. Undeveloped land devoted to open space use may include area set-aside because of hazardous conditions such as earthquake fault zones, unstable soil areas and flood plains. In addition, a community's land use element usually incorporates the findings and recommendations relating to public safety and open space lands. For example, a separate "open space" land use

category may be established which would designate open space lands to protect public health and safety.

FINDINGS AND CONCLUSIONS

This section provides a summary of the principal findings and conclusions relating to the conditions described in the "introduction." The research findings and conclusions are based upon previous studies conducted on this subject, interviews with City staff and an engineering and geology study completed for the General Plan in August 1985. That study and the definitions of important geologic terms are included in Section E of the Technical Appendix.

Other sources of background data pertaining to this Element are listed below:

- The 1973 Seismic Safety Element.
- Report of Seismic Hazard for the City of San Fernando, Los Angeles County, California (Woodward-McNeill & Associates)
- Report on Damage to Water Wells Reservoirs and Water Distribution System of the City of San Fernando caused by the San Fernando Earthquake of February, 1971 (Public Works Department, 1972).
- Pacoima Dam Evacuation Contingency Plan (1985).

Findings

1. The active San Fernando fault zone is located within a portion of the City. It is a northwest trending fault zone that dips steeply towards the north and passes through the City at its northern corner. Moreover, it has been zoned as an "active fault" on the California Division of Mines and Geology maps for fault hazard zones.
2. The potentially active Verdugo fault is situated at the southern corner of the City. This fault is identified primarily by means of a groundwater barrier and it has no known surface expression.
3. The most severe ground shaking would be related to a nearby earthquake on the San Fernando or Santa Susana fault zones.
4. The relatively level terrain within the City eliminates the possibility of ground failure related to slope instability and landslides.

5. Liquefaction, a temporary loss of strength in saturated sandy soil due to ground shaking, is not a hazard due to the low groundwater table. The one exception consists of an area in the southwestern portion of the City.

6. There is no potential for tsunamis or seiches. These terms refer to waves created in bodies of water due to seismic activity.

7. The City has not been subjected to significant subsidence or uplift during its history. However, there was some tectonic uplift during the San Fernando Earthquake in 1971. Subsidence may be defined as the downward movement of a relatively large area due to the withdrawal of subsurface water and/or petroleum. Conversely, uplift is the upward movement of a relatively large area due to the injection of water or petroleum and/or tectonic forces. The maximum uplift within the City is approximately five feet near its northern corner.

8. Nearly all of the soil materials in the City are or can be rendered suitable for development.

9. Portions of the City of San Fernando would be subject to inundation should water breach the Pacoima Dam.

10. The potential for spills of hazardous materials is associated primarily with truck tanker and truck trailer traffic through the City.

11. Industrial accidents could also result in the spillage of chemicals on City streets.

12. The Los Angeles City Fire Department provides fire protection to the City of San Fernando. Three stations respond to fire calls and each provides emergency medical services.

Conclusions

1. The City will probably experience ground shaking from earthquake activity associated with the active fault systems denoted earlier. Fault hazard zones are shown in Exhibit VIII-1. The maximum credible magnitude of 6.5 could produce a peak ground acceleration of approximately 0.35 gravity. For comparison, the maximum credible magnitude of 8.25 on the San Andreas fault zone could produce a ground acceleration at the City of approximately 0.23 gravity. The difference in acceleration values is related to the greater distance to the San Andreas fault.

2. There may be fault movement and related ground rupture along the San Fernando and Verdugo fault zones as well as associated hazards to building in and near the fault zones.

3. A high level of fire service is provided by Los Angeles City Fire Stations 75, 98 and 91.

4. Seismic compaction of soils would occur in the alluvial deposit areas of looser materials.

5. There may be ground settlements and failures in areas susceptible to liquefaction and compaction due to earthquake ground shaking. These areas would most likely be very limited.

6. The Pacoima Dam and the Lopez Dam are considered stable and safe. The possibility of dam failure is very remote.

7. Truck traffic is confined primarily to industrial areas of the City. The City has experienced only one spill associated with the transport of hazardous materials and has experienced no industrial fires involving toxic substances.

ISSUES AND OPPORTUNITIES

This section identifies safety related issues and opportunities affecting the City. Specific areas of geologic hazard and other safety hazards that present planning constraints are identified in this section. Planning opportunities to improve community safety are also identified. Background and research data are presented in Section E of the Technical Appendix.

Issues

1. There is potential for seismic hazards associated with ground rupture along earthquake faults and ground shaking from regional seismic activity.

2. Seismic activity may result in subsidence and uplift within the City.

3. In the southwestern portion of the City, there is potential for liquefaction to a water table depth of 40 feet.

4. Portions of the City would be subject to inundation should a failure occur at the Pacoima Dam.

Opportunities

1. Supplemental studies on the site specific features of geology, seismicity and structural engineering should be required for large or complex buildings and/or critical facilities in order to determine if and what criteria in addition to the Uniform Building Code are necessary for protection of public health and safety.

2. All structures must conform to the Uniform Building Code.

3. There should be continued groundwater control by the water districts to minimize the potential for subsidence and uplift. Infrastructure facilities should be maintained continually by the City.

4. The City adopted a Hazardous Materials Operational Response Plan in 1984. This Plan, which is on file at the Planning Department, guides City departments and personnel in the proper handling of a hazardous material accident.

5. The City adopted a Pacoima Dam Evacuation Contingency Plan in 1985. The Plan established procedures for the efficient evacuation of all persons from potential inundation areas. A copy of the Plan is on file at the Planning Department.

6. Building should be controlled within and near the San Fernando Fault Zone by means of the Alquist - Priolo Special Studies for Fault Hazards. These studies require detailed geologic investigations for sites located within the fault hazards zone to determine the presence of any faults and/or fault branches that may be active in order to preclude construction on an active fault trace. The special studies are required for all proposed building in the San Fernando fault zone. The Verdugo fault involves a secondary zone where similar studies should be required for all critical and high rise or complex building as a precautionary measure.

7. In 1983, the City adopted an Emergency Plan to ensure the most effective and economical use of all resources for the maximum benefit and protection of the civilian population in time of emergency. The City Emergency Plan is on file at the Planning Department.

8. Fire Station 75 is staffed by 36 persons, including emergency medical technicians. Station 98 is staffed by 36 persons and Station 91 is staffed by 18 persons. Both Stations 91 and 98 provide paramedic services and all stations have an ambulance, in addition to fire suppression equipment.

GOALS AND OBJECTIVES

The following goals and objectives are recommended for purposes of protecting the public health and safety. They are based on the background data found in Section E of the Technical Appendix, the identified issues and opportunities and legislative requirements for safety elements.

Goals

1. To protect the citizens of the City of San Fernando from injury or loss of life due to the occurrence of any natural disaster.

2. To preserve life and property in the event of an emergency by providing a basis for the conduct and coordination of operations and the management of critical resources during emergencies.

3. To establish responsibilities and actions required to meet the City's obligation of protecting the lives and health of the population from spillages of hazardous materials.

4. To provide a safe and healthful environment for the San Fernando community.

Objectives

1. To identify the relationship between land use and geologic hazards and to identify any areas where development should be restricted or otherwise controlled due to hazardous geologic conditions.

2. To provide for the rapid deployment of an effective traffic control force in potential inundation areas.

3. To define responsibilities and tasks of each participating agency regarding emergency response.

4. To provide a basis for incorporating into the City emergency organization non-governmental agencies and organizations having resources necessary to meet foreseeable emergency requirements.

IMPLEMENTATION MEASURES

The policies and action programs that will be implemented in the future to protect public health and safety are described below. In several instances, the implementation measures reflect the practices of the City enacted in this area during the recent years.

Policies

1. It is recommended that persons requesting building permits be referred to the General Plan map to make them aware of seismic hazard areas.

2. The City's Emergency Response Plan should be reviewed periodically and updated as necessary.

Action Programs

The City is actively implementing a number of programs to minimize the impacts associated with geologic conditions, fires and hazardous materials accidents.

1. The City shall continue to enforce the seismic requirements of the Uniform Building Code. The criteria includes standards for resistance to total lateral seismic forces, setbacks, framing and the reinforcement of masonry or concrete.

2. Supplemental geologic studies shall be required regarding site specific features for critical and large buildings to determine if criteria in addition to the Uniform Building Code will be necessary.

3. The City will continue regular maintenance of infrastructure facilities to minimize the potential for uplift.

4. The Los Angeles Fire Department will continue its Fire Prevention Program which includes annual inspection of all residential, commercial and industrial structures.

5. The City shall continue to enforce the Pacoima Dam Evacuation Contingency Plan. Implementing agencies consist of the Los Angeles County Flood Control District, the Los Angeles County Sheriff's Department, the Los Angeles Police Department and the San Fernando Police Department.

6. The City shall respond to hazardous materials spills in the manner outlined in the Hazardous Materials Operational Response Plan. Implementing agencies consist of the San Fernando Police Department, the San Fernando Office of Emergency Services, the Los Angeles City Fire Department, the San Fernando Water and Public Works Departments and the Air Pollution Control Office.

7. The City will continue to implement its Emergency Plan which is operative at the authorization of the Director of Emergency Services.

8. The City has adopted designated truck routes which restrict the transport of hazardous materials to certain major arterials.

IX.
NOISE ELEMENT

INTRODUCTION AND BACKGROUND

Introduction

Existing and future development areas of San Fernando will be affected by the noise environment. The purpose of the Noise Element is to provide information on current and future noise levels in the City. In largely undeveloped areas, this information is used to identify the most suitable locations for various land uses, especially those that are particularly sensitive to noise impacts. In more built-out areas, the noise element provides a general plan basis for the enforcement of noise associated standards and codes and thereby protect the health and well-being of the persons living and working in San Fernando.

Background

A Noise Element has been a requirement of the general plan since 1971. In 1975, amendments to the legislation were made and the Office of Noise Control, Department of Health Services, issued a set of Noise Element Guidelines. Amendments addressing

the content of the Noise Element were adopted by the State legislature in 1985. Section 65302(f) of the California Government Code requires:

> "A noise element which shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels...."

Current and projected noise levels are required for several sources such as highways and freeways; local streets and primary arterials; railroad operations; airport operations; local industrial plants; and other ground stationary noise sources.

FINDINGS AND CONCLUSIONS

Noise contour maps and tables have been prepared to determine current and future ambient noise levels at various points throughout the City. The noise levels are expressed in terms of "community noise equivalent level" (CNEL). This is a 24-hour measurement with noises occurring in the evening and early morning hours weighted higher than daytime noises. An explanation of noise terminology is contained in the Technical Appendix. The major findings and conclusions pertaining to community noise are presented in the following list:

1. Vehicular traffic along I-5, I-405, I-210 and State Route 118 generally impacts the City of San Fernando. Existing ambient traffic noise contours are shown in Exhibit IX-1.

2. Schools, hospitals, rest homes and residential neighborhoods are the most noise sensitive land uses in the City.

3. Approximately five trains a day pass through the City of San Fernando.

4. The nearest airport is the Los Angeles County owned Whiteman Airport, located approximately 1˝ miles south of San Fernando. This airport is utilized by small private planes.

ISSUES AND OPPORTUNITIES

On the basis of the data included in the Technical Appendix and the legislative requirements, several issues and opportunities were identified.

Issues

1. Because the City is surrounded by freeways, noise generated by vehicular traffic is the most significant noise source affecting San Fernando.

2. Currently, noise levels exceeding 65 dB CNEL occur primarily south of First Street. In the northern portion of the City, higher noise levels occur adjacent to Glenoaks Boulevard, Fourth Street, Maclay Avenue and Brand Boulevard.

3. Increases in vehicular traffic noise will result from infill development in the City and other regional traffic passing through San Fernando. Current and future CNEL contour distances from roadway centerlines are presented in the Noise Impact Tables of Section F in the Technical Appendix).

4. Future traffic noise, based on year 2005 traffic projections will result in ambient noise levels of 65-70 dB CNEL throughout most of San Fernando.

Opportunities

1. Through the use of the noise impact contour maps and the Noise Impact Tables presented in Section F of the Technical Appendix, areas where site specific acoustical analysis should be required can be identified readily.

2. Since new construction must comply with California Administrative Code Title 25 structural sound control requirements, there will be a reduction of potential noise impact problems.

3. Enforcement of the noise related standards and codes will reduce periodic intrusive noises.

GOALS AND OBJECTIVES

The goals and objectives contained in this section of the Noise Element provide a framework for future efforts toward achieving a quiet and healthful community environment.

Goals

1. To minimize noise impacts to the people who live and work in San Fernando.

2. To control noise in San Fernando for the protection of the health and well being of its current and future citizens.

3. To maintain or reduce noise levels in noise sensitive areas.

Objectives

1. To reduce transportation noise by imposing traffic restrictions where necessary.

2. To identify potential land use conflicts and to determine where acoustical analysis and mitigation studies will be necessary through the periodic use of the noise contour maps and noise impact tables.

3. To incorporate noise control techniques, as appropriate, in housing rehabilitation programs.

4. To require project applicants to reduce or buffer noise generated by a proposed development if it would otherwise create an unsatisfactory noise environment for adjacent properties.

IMPLEMENTATION MEASURES

The Noise Element of the San Fernando General Plan establishes not only goals and objectives to control or abate noise but also somewhat more specific implementation measures to mitigate problems. The implementation measures include a series of policies by which to judge future development proposals and regulatory tools to facilitate the implementation of a program to reduce noise in the City of San Fernando.

Policies

1. Implement strict enforcement of the noise standards in the Motor Vehicle Code as well as other State and Federal legislation pertaining to transportation related noise.

2. Noise referral zones for areas projected to exceed 75 dB should be established. Development projects located within these zones should be examined for noise impact. Where potential

noise incompatibility is determined to exist, action should be taken to eliminate or mitigate possible incompatibilities.

3. When preparing the City of San Fernando Noise Ordinance, the City should utilize, as appropriate, the Model Noise Ordinances of the State of California and United States Environment Protection Agency.

Action Programs

1. A Noise Ordinance will be adopted by the City.

2. Noise contour maps and noise contour tables have been developed (refer to Section F of the Technical Appendix).

3. Noise Referral Zones should be considered. Based on future noise projections, as shown in Exhibit IX-11, the City could establish an overlay zone called the "Noise Referral Zone" for indoor uses.

4. The City could identify all residential areas near the State freeways which need remedial acoustical protection. Estimates would be made on the lineal feet of acoustical wall needed to provide noise attenuation. The State and/or County would then be requested to provide the remedial correction.

5. Under Chapter 1.4, Section 126, of the Street and Highways Code, educational facilities should be measured by the State to evaluate compliance with the 50 dBA interior noise standard. The number of schools corrected per year by the State would be used as a measure of the process in achieving noise compatibility.

6. Recent studies have shown that the most objectionable feature of traffic noise is noise produced by vehicles equipped with illegal or faulty exhaust systems. In addition, "hot rod" vehicles are often operated so that tires squeal and excessively loud exhaust noise is produced.

There exist a number of Statewide vehicle noise regulations that can be enforced by local authorities as well as the California Highway Patrol. Specifically, Sections 23130, 23130.5, 27151, and 38275 of the California Vehicle Code, as well as excessive speed laws may be applied to curtail this problem. Both the California Highway Patrol and the Office of Noise Control (through local health departments) are available to aid local authorities in code enforcement and training.

The following paragraphs explain the nature and purpose of a "noise referral zone." The Noise Referral Zone could be defined as any area within the 65 dB CNEL contours. This level is selected because of its relationship with indoor noise levels resulting from intruding outdoor noise. Basically, any structure housing noise sensitive uses: e.g., office, residential, lodging, etc. -- could be required to provide a quiet environment. In areas above 65 dB CNEL, building design becomes important in achieving proper indoor noise levels even though outdoor noise environments are in compliance with the recommended levels for the land use.

The Noise Referral Zone concept is in support of the recommended Federal EPA "Levels Document" and the State of California Noise Insulation Standards. The State requires that interior noise levels resulting from the intrusion of exterior noise be limited to not more than 45 dB CNEL for all attached dwelling units and transient lodging facilities, i.e., hotels, motels, townhouses, condominiums, apartments, duplexes and so on. Most cities are also following this lead and are requiring this noise limitation for single family detached dwellings.

The amount of noise that is appropriate or tolerable for various types of non-residential indoor uses has been the subject of considerable study by architects, acoustical engineers, scientists, and psychologists. Noise levels for commercial uses are averaged over a 12 hour period (Leg 12) from 7:00 a.m. to 7:00 p.m. Maximum acceptable levels are listed below:

Land Uses	Interior Level, Leg12, dBA (7 am to 7 pm)
Private Offices	45
General Offices, Reception, Clerical, etc.	50
Bank Lobby, Retail Stores, Restaurant, Typing Pool, etc.	55
Other Areas for Manufacturing, Assembly, Text, Warehousing, etc.	65

To reduce noise impacts to the people that live and work in San Fernando, the recommended noise limitations for both interior and exterior uses should be met. The

City should require all projects occurring within the Noise Referral Zone (or within a suspected high noise environment) to meet the interior and exterior standards of the Noise Element through proper acoustical engineering as provided for in the State Noise Insulation Standards (Title 25 of California Administrative Code). Notification would be provided to prospective developers by the Planning Department that a condition of issuance of permits would be compliance with noise standards by design of an acoustical engineer. No building permits would be issued without approval of City staff of the acoustical report/design. This removes financial burden from the City and places it upon users.

INTERNAL CONSISTENCY

By law, the findings and recommendations of the Noise Element are tied to the Land Use Element. Section 65302(f) of the Governmental Code states:

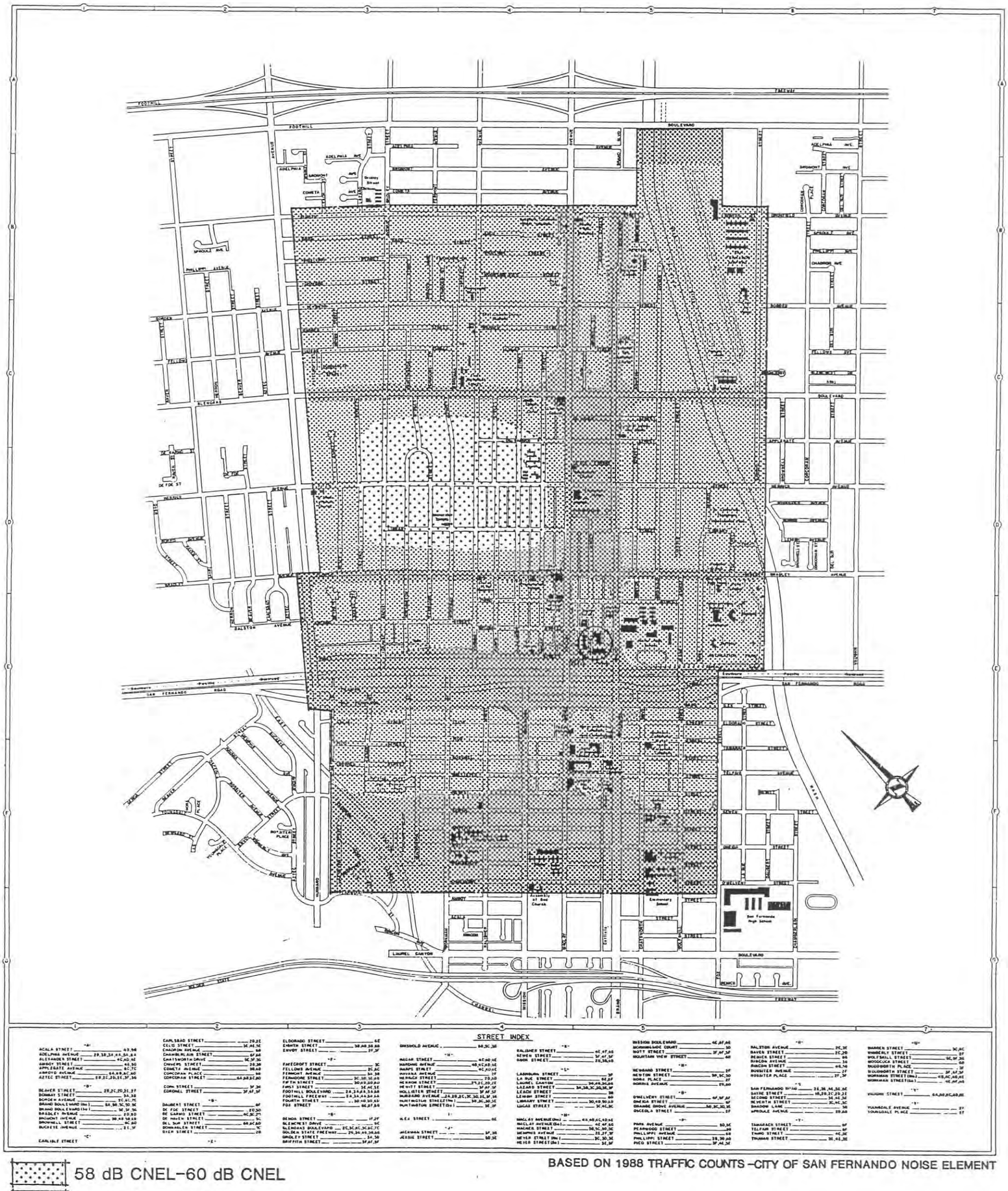
> "The noise contours shall be used as a guide for establishing a pattern of land uses in the Land Use Element that minimizes the exposure of the community residents to excessive noise.

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58 dB CNEL–60 dB CNEL

60 dB CNEL–65 dB CNEL

OVER 65 dB CNEL

BASED ON 1988 TRAFFIC COUNTS –CITY OF SAN FERNANDO NOISE ELEMENT

Current Noise Contours
SAN FERNANDO GENERAL PLAN

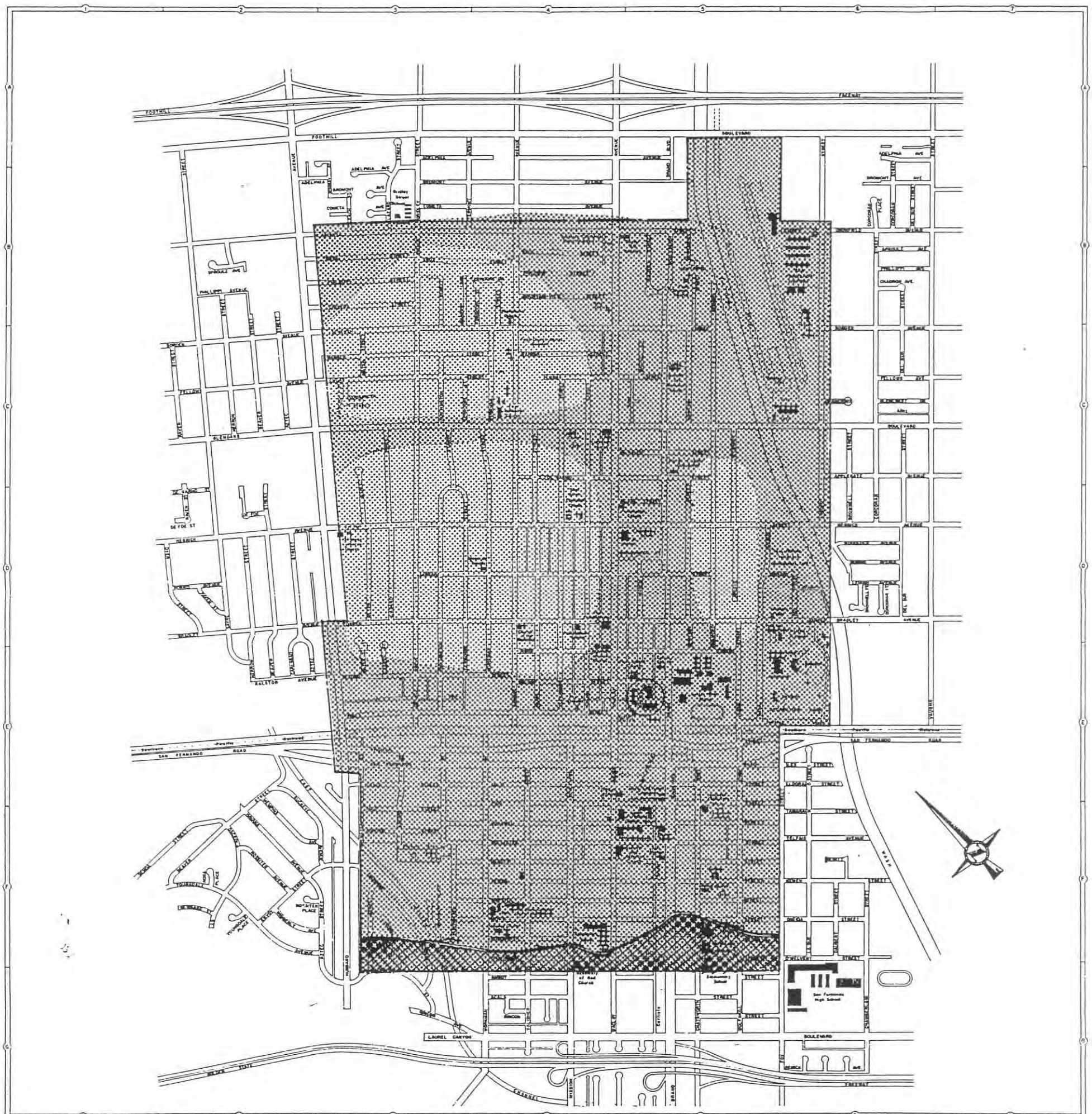
EXHIBIT IX-I

"THE MISSION CITY"

SAN FERNANDO

CALIFORNIA

INCORPORATED AUGUST 31, 1911



STREET INDEX

"A"
ACALA STREET 4B,5B
ADELPHIA AVENUE 2B,3B,3A,4A,5A,5A
ALEXANDER STREET 4C,4D,4E
AMBOY STREET 4B,5C
APPLEGATE AVENUE 6C,7C
ARROYO AVENUE 6A,6B,6C,6D
AZTEC STREET 2B,2C,2D,2E,3F,3G

"B"
BEAVER STREET 2B,3C,3D,3E,3F
BONDAY STREET 3A,3B
BORDEN AVENUE 3C,6C,7C
BRAND BOULEVARD (No.) 5A,5B,5C,5D,5E
BRAND BOULEVARD (So.) 5E,5F,5G
BRADLEY AVENUE 2D,6D
BROMONT AVENUE 3B,4B,5B,6B
BROWNELL STREET 4C,6D
BUCKEYE AVENUE 2E,3F

"C"
CARLISLE STREET 2D,2E
CARLSBAD STREET 2D,2E
CELIS STREET 3E,4E,5E
CHADRON AVENUE 6B
CHAMBERLAIN STREET 6F,6G
CHATSWORTH DRIVE 5E,5F,5G
CHIVERS STREET 2B,3B
COMETA AVENUE 3B,4B
CONCORAN PLACE 6B
CORCORAN STREET 6A,6B,6C,6D
CORK STREET 5F,5G
CORONEL STREET 3F,4F,5F

"D"
DAUBERT STREET 6F
DE FOE STREET 2D,3D
DE GARMO STREET 4C,5C,7D
DE HAVEN STREET 5C
DEL SUR STREET 6B,6C,6D
DONNAGLEN STREET 7C
DYER STREET 2D

"E"
ELDORADO STREET 6E
ELMITH STREET 5B,6B,7B,6B
ENVOY STREET 2F,3F

"F"
FAIRCROFT STREET 5C
FELLOWS AVENUE 2C,3C
FERMONT AVENUE 3A,3B
FERNDORE STREET 5C,3D,3E,4D
FIFTH STREET 3D,4D,5D,6D
FIRST STREET 3E,4E,5E
FOOTHILL BOULEVARD 2A,3A,4A,5A,6A
FOOTHILL FREEWAY 2A,3A,4A,5A,6A
FOURTH STREET 3D,4D,5D,6D
FOX STREET 4C,4F,5F

"G"
GENOA STREET 1F,2F
GLENCREST DRIVE 5C
GLENOAKS BOULEVARD 2C,3C,4C,5C,6C,7C
GOLDEN STATE FREEWAY 2E,3E,4E,5E,6E,6E
GRADLEY STREET 3A,3B
GRIFFITH STREET 5F,6F,7F

"H"
HAGAR STREET 4C,4D,4E
HARDING AVENUE 4B,4C,4D,4E
HARPS STREET 4C,4D,4E
HAVANA AVENUE 2F
HORACE STREET 2D,4D
HERRON STREET 3F,3G,2D,2E
HEWITT STREET 3F,4F,5F
HOLLISTER STREET 5F,6F,7F
HUBBARD AVENUE 2A,2B,2C,3C,3D,3E,3F,3G
HUNTINGTON STREET (No.) 3B,3C,3D,3E
HUNTINGTON STREET (So.) 3E,3F

"I"
ILES STREET 6C

"J"
JACKMAN STREET 5F,5G
JESSIE STREET 5B,5C

"K"
KALISHER STREET 4E,4F,4G
KEYDEN STREET 3F,4F,5F
KIRBY STREET 2D,3D,4D

"L"
LASHBURN STREET 3F
LA RUE STREET 6E,6F
LAUREL CANYON 3A,4A,5A,6A,7A
LAZARD STREET 3A,3B,3C,3D,3E,3F
LEACH STREET 5D
LEHIGH STREET 6D
LIBRARY STREET 3D,4D,5D,6D
LUCAS STREET 3C,4C,5C

"M"
MACLAY AVENUE (No.) 6A,6B,6C,6D,6E
MACLAY AVENUE (So.) 4E,4F,4G
MACNEIL STREET 3A,3C,3D,3E
MEMPHIS AVENUE 2E,2F,3F
MEYER STREET (No.) 3C,3D,3E
MEYER STREET (So.) 3E,3F
MISSION BOULEVARD 4E,4F,4G
MORNINGSIDE COURT 5D
MOTT STREET 3F,4F,5F
MOUNTAIN VIEW STREET 6B

"N"
NEGARO STREET 3F
NEWTON STREET 5B,5C,5D
NORA PLACE 2F
NORRIS AVENUE 2D,3D

"O"
O'MELVENY STREET 6F,6F,6F
ONEIDA STREET 6F
ORANGE GROVE AVENUE 3D,3C,3D,3E
OSCEOLA STREET 2F

"P"
PARK AVENUE 5D,5E
PEARWOOD STREET 3B
PHILLIPPI AVENUE 6D
PHILLIPPI STREET 2B,3B,4B
PICO STREET 3F,4E,5E

"R"
RALSTON AVENUE 2C,3C
RAVER STREET 2C,2D
REDINCK STREET 6B
RINCON AVENUE 3B
RINCON STREET 4B,4A
ROBERTS AVENUE 2F
ROBERTS PLACE 2F,3F

"S"
SAN FERNANDO ROAD 2E,3E,4E,5E,6E,6E
SAYRE STREET 4B,2B,2C,2D,2E
SECOND STREET 3E,4E,5E
SEVENTH STREET 3C,4C,5C
SHADOW LANE 3B
SPRUCE AVENUE 2D,6D

"T"
TAMARACK STREET 6F
TELFAIR STREET 6F
THIRD STREET 4E,5E
TRUMAN STREET 3E,4E,5E

"U"
UNDINE STREET 3C,6C
UNDERHILL STREET 2F
WOLFSKILL STREET 5E,5F,5G
WOODRUFF STREET 5D
WOODWORTH PLACE 3F
WOODWORTH STREET 3F,4F,5F
NORMAN STREET (No.) 6B,6C,6D,6E
NORMAN STREET (So.) 6E,6F,6G

"V"
VAUGHN STREET 6A,6B,6C,6D,6E

"Y"
YOUNGDALE AVENUE 2F
YOUNGDALE PLACE 2F

62.5 dB CNEL–65 dB CNEL

65 dB CNEL –70 dB CNEL

OVER 70 dB CNEL

BASED ON YEAR 2005 TRAFFIC PROJECTIONS (USING 2.5% ANNUAL FROM 1983 BASE YEAR)

Future Noise Contours
SAN FERNANDO GENERAL PLAN

EXHIBIT IX-II

RESOLUTION NO. 6307

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF SAN FERNANDO
AMENDING GENERAL PLAN AMENDMENT
GPA 1993-003 TO INCORPORATE
A MASTER BIKEWAY PLAN
INTO THE CIRCULATION ELEMENT
(GENERAL PLAN AMENDMENT NO. GPA 1993-003)

WHEREAS, the City Council identified the need for a citywide bikeway plan to encourage bicycle commuting throughout the city, and requested the Planning Commission review the Bikeway Master Plan for the establishment of bikeways and bicycle facilities; and

WHEREAS, development of a bikeway system and bicycle facilities encourages bicycle commuting as an alternative mode of transportation in compliance with state and local mandates for cleaner air and trip reduction measures; and

WHEREAS, compliance with state and local mandates requires incorporation of the Bikeway Master Plan into the general circulation element; and

WHEREAS, on December 7, 1993, the Planning Commission, following a duly noticed public hearing, at which evidence, both oral and written, was presented to and considered by said Commission, recommended to the Council that the General Plan Amendment GPA 1993-003 be amended to incorporate a Bikeway Master Plan into the general circulation element as set forth in Planning Commission Resolution No. 1097 ; and

WHEREAS, on December 20, 1993, the City Council held a duly noticed hearing to consider whether to amend GPA 1993-003. Evidence, both oral and written, was duly presented to and considered by the Council as said hearing.

THE CITY COUNCIL OF THE CITY OF SAN FERNANDO HEREBY FINDS, RESOLVES AND ORDERS AS FOLLOWS:

SECTION 1: Although no convenient bikeways currently exist throughout the City, a Class I bikeway is planned to be built along the Metrolink Corridor within the City limits.

SECTION 2: Applications for matching fund grants through programs such as the Bicycle Lane Accounts program require incorporation of a Bikeway Master Plan into the City's general circulation element. These programs offer funds to jurisdictions wanting to develop bicycle programs to encourage bicycle commuting as an alternative mode of transportation.

SECTION 3: State and local air quality regulations recommend jurisdictions implement trip reduction measures to reduce automobile emissions, a major source of air pollution in Southern California. Bikeway routes and bicyclist facilities outlined in the Bikeway Master Plan were drafted with the intention to comply with these regulations.

SECTION 4: Pursuant to CEQA Guidelines Section 15063, an Initial Study has been prepared for this project. After reviewing the Initial Study, the proposed Negative Declaration, and all comments received during the public review process, the City Council has determined that the project will not have a significant impact upon the environment. As a result of its review of the aforementioned documents, the City Council hereby approves the Negative Declaration and authorizes the Community Development Director to issue a Notice of Determination pursuant to CEQA Guidelines Section 15075.

Pursuant to Title 14, California Code of Regulations, Section 753.5(c) (1), the City Council has determined that, after considering the record as a whole, there is no evidence that the proposed project will have the potential for any adverse affect on wildlife resources or the habitat upon which the wildlife depends. Furthermore, on the basis of substantial evidence, the City Council hereby determines that any presumption of adverse impact has adequately been rebutted, and therefore, pursuant to Fish and Game Code Section 711.2 and Title 14, California Code of Regulations Section 753.5(a)(3), the project is not required to pay Fish and Game Department filing fees.

SECTION 5: The City Council therefore approves the general plan amendment GPA 1993-03 incorporating the Bikeway Master Plan into the General Circulation Element, as described in Exhibit "A" attached hereto and made a part hereof.

SECTION 6: The City Clerk shall endorse the amended general plan GPA 1993-03 incorporating the Bikeway Master Plan Circulation Element

PASSED, APPROVED AND ADOPTED this 20th day of December, 1993

MAYOR

CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss
CITY OF SAN FERNANDO)

I, MARY STRENN, City Clerk of the City of San Fernando, do hereby certify that the foregoing Resolution No. 6307 was duly adopted by the City council and signed by the Mayor of said City as a meeting held on the 20th day of December, 1993; and that the same was passed by the following vote, to wit:

AYES: Acuna, Hernandez, Chacon, Ojeda, Wysbeek - 5

NOES: None - 0

ABSENT: None - 0

ABSTAIN: None - 0

CITY CLERK

CC-224.PW

EXHIBIT "A"
(GPA 1993-03)

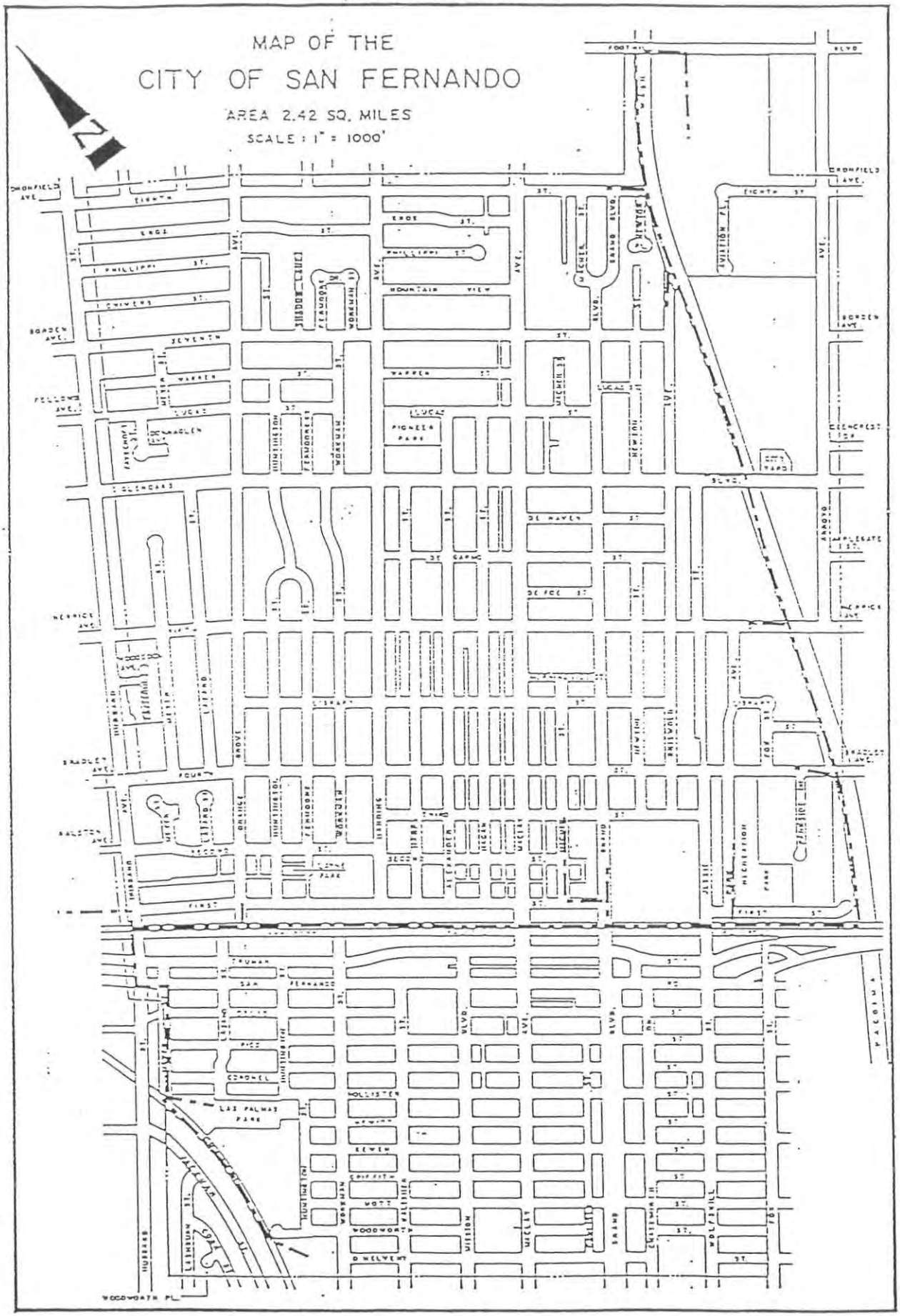


EXHIBIT 23

Recreation and Open Space Element

INTRODUCTION

With its dramatic physical setting comprised of hilltops and mountains, surrounded by the bay and ocean, with nature woven through the landscape, San Francisco has an intrinsic connection with its environment. The opportunity the City provides to move outside and connect with nature has drawn countless thousands here over time, and that draw continues today.

As our City grows, we must not lose sight of these very qualities. If San Francisco is to continue to offer its residents, visitors, and workers a vibrant, civic, livable environment connected with the wonders of the natural world, we need a framework that ensures a world-class open space system. The goal of the City's Recreation and Open Space Element is to continue the City's legacy of fine parks and recreational opportunities, and guide the City's future decisions so they improve that open space system for the benefit of everyone.

Why Is Recreation and Open Space Important?

Recreation and open space are critical components of any community's quality of life; for San Franciscans they are defining elements of the City itself. The City's open space system provides places for recreation, activity and engagement, for peace and enjoyment, and for freedom and relief from the built world. It serves the social and environmental health of the City, providing a sustainable environment. Among its benefits:

- **Open space and recreation activities improve resident's physical and mental health.** Open spaces and recreational facilities offer a wide range of health related benefits. They provide an opportunity for residents and visitors to exercise, give residents access to sunshine, nature and fresh air, and even encourage people to walk or bike from place to place. They can have a significant impact on people's stress levels and overall mental health, particularly in urban areas like San Francisco, and can be proven to be actual preventative measures that impact positively on health care and health care costs. Physical recreation reduces obesity and risk of cardiovascular disease, diabetes and other health ailments. Public open spaces, whether playgrounds, picnic fields or even just engaging streets, can help build community by giving neighbors a realm in which to get to know each other, and giving children a safe place to play.

- **Open space promotes environmental sustainability.** Natural habitat provides sanctuary for wildlife species ranging from mammals, birds and insects to plants; trees and other types of vegetation provided in open space networks can reduce air pollution; and wetlands can filter contaminants. The trails and streets of an open space network can also aid in reducing greenhouse gases, by providing alternative transportation routes and promoting bicycling and walking.

- **Open space and recreation activities can help to address environmental justice across a community.** Public recreation provides accessible and low cost opportunities to all San Franciscans, regardless of income level. High rates of childhood obesity and illness often correspond to fewer acres of usable open space. Provision of open space in areas with high concentrations of density, poverty, youth or seniors can redress equity issues. A clear example is how local food production increases access to fresh local produce and provides an opportunity for communities to connect with nature.

- **Open space provides tangible economic benefit.** Numerous studies have quantified the dollars that parks and tree plantings bring back to a city, by making the area more attractive for investment, by attracting and expanding local businesses, by increasing tourism and by enhancing property values. The Trust for Public Lands' study, The Economic Benefits of Parks & Open Space, cited testimony that our own Golden Gate Park has been shown to increase the value of nearby property to the tune of $5-$10 million additional dollars annually.

How Are We Doing in Providing Recreation and Open Space?

By any measure, San Francisco is performing well against its urban counterparts. San Francisco has well over 3,400 acres of recreation and open space owned and managed by the Recreation and Park Department (RPD). It also contains over 250 acres of open space owned and managed by the State of California, and another 1600 acres of federally-owned open space. These publicly-owned open spaces make up almost 20% of the City's total land area. The quantity of usable open space increases even more when one includes the other spaces owned by city agencies, college campuses, schoolyards open during non-school hours, urban plazas or other publicly accessible outdoor spaces throughout the City, by another 560 acres. This puts San Francisco among the top five cities in the country in terms of parkland per resident. All of these open spaces are shown in *Map 1: Existing Open Space*.

MAP 1 - Existing Open Space

The 2004 Recreation Assessment was the culmination of a nine-month planning effort and process to evaluate the recreation needs of residents and to ensure the future direction of recreation within the SFRPD. The assessment pieced together critical issues, challenges and opportunities. It was the first such report developed solely for recreation in SFRPD's history. The Recreation Assessment identified where the SFRPD should focus its energies and resources as it applies to the Recreation Division, continuing the legacy of high quality recreation facilities and program services for the citizens of San Francisco. SFRPD should regularly assess its recreation component as required in the Charter. See *Map 2* for a map of existing Recreation Facilities.

MAP 2 - Existing Recreation Facilities

San Francisco values its recreation and open spaces. In 1974, San Francisco voters passed Proposition J, which directs a percentage of property taxes towards the City's Open Space Fund, to acquire new parks and open space. We spend more than any other urban area per resident on our parks, according to a 2008 report by the Trust for Public Lands, at an average of almost $200 per resident. But more revenue is needed as land costs increase and as we move to meet the challenges of providing space and recreation opportunities for a growing population.

How Do We Define Recreation and Open Space?

Recreation and open space are critical components of any city, and by necessity have to come in different forms and experiences. Open space provides the 'breathing room' in a dense urban environment and promotes opportunities to engage in outdoor activities, access nature, enjoy scenic views, and experience our City's many ecosystems. Recreation includes activities that happen within open space both at outdoor or indoor facilities, the key elements being that the activity is beneficial by way of being fun, stimulating, refreshing, or relaxing in some form, either physical, mental, or the combination of the two. Active recreation involves physical activity while passive recreation usually involves sitting or lying down. Active recreation refers to a mix of uses in a neighborhood park that includes the following facilities types: athletic fields, buildings or structures for recreational activities, concessions, community gardens, courses or sport courts, children's play areas, dog play areas, or bike paths. A passive recreation area refers to a mix of uses in a park, undeveloped land or minimally improved lands which can include the following: landscaped areas, natural areas, ornamental gardens, non-landscaped greenspaces, stairways, decorative fountains, picnic areas, and water bodies without recreational staffing.

San Francisco's definition of recreation and open space system includes a variety of types of spaces, including traditional spaces and facilities for recreation such as:

- **Recreation Centers:** The City operates 25 multi-use recreation centers, providing playground and sports opportunities, as well as programming for youth, adults and seniors.
- **Playgrounds:** Children's playgrounds including play structures for toddler and older children.
- **Playing fields:** Including baseball courts, soccer fields, basketball and tennis courts, as well as children's and toddlers' playgrounds.
- **Unprogrammed or Unstructured Open areas:** Grassy, landscaped, or even paved open areas provide opportunities for unstructured time away from the dense urban environment.
- **Trails and Natural Areas:** Including 1,100 acres of natural lands, protecting the plant and animal habitats of these unique landscapes for residents and visitors to enjoy, trail systems, and other planted green areas.
- **Cultural Arts and Recreation Centers:** The Recreation and Parks Department offers a variety of classes, community event spaces, and cultural activities such as: art camps, dance and theater classes, programs on music and poetry for all ages.
- **Sports and Athletics:** The City's robust system of sports programs and facilities includes several citywide sports facilities, such as Kezar Complex in Golden Gate Park and Crocker Amazon Park Playground Sports Facility.

The recreation and open space system also includes spaces that supplement traditional parks in the City such as:

Community Gardens: Opportunities for residents to grow produce and flowers in their neighborhoods.

- **Living Streets, and alleys, plazas or parklets:** These are components of the public right-of-way that have been improved to provide a gathering space and enhance the pedestrian experience.

- **Privately-owned Public Open Spaces (POPOS):** Spaces owned by private development that are accessible to the public. POPOS come in a variety of forms including plazas, rooftop terraces, Greenhouse, and sun terraces, and include landscaping and public seating for the enjoyment of the public usually in dense neighborhoods.

- **Piers and wharves:** These are waterfront open spaces that provide shoreline access along the Bay edge. The Port provides public access along the perimeter of many of its piers as well as on individual public Piers such as Pier 7 and 14 as well as others.

Lastly, the system also includes spaces unique to San Francisco, such as such as Coit Tower, Union Square, Stern Grove, Palace of Fine Arts, and lesser known amenities like Camp Mather that offers outdoor camping experiences.

Guiding Principles for Open Space and Recreation

San Francisco provides a significant amount of open space already for its residents, particularly given its small land area, its hilly topography, and its density, all of which challenge open space development. But we can do better, particularly in the better utilization, maintenance and design of our open spaces. The policies of the General Plan are intended to improve these aspects of our recreation and open space system. A holistic recreation and open space system encompasses the full range of spaces within our definition of open space, as well as the necessary experiences that are integral to San Francisco's unique identity. The Recreation and Open Space Element follows these guiding principles to ensure such holistic system:

1. INTEGRATED & MULTIFUNCTIONAL. A major theme developed from the outreach process was the concept of "making the most of what we have": utilizing and improving the expansive recreation and open space system the City already provides. An integrated and multi-functional open space network would respond to a variety of needs for recreation and open space, better utilizing the existing resources. Such needs range from refreshing from daily pressures of life to exercising and active sports, from appreciating the beauty of nature to maintaining natural habitats and wildlife, and from enjoying play time for kids and adults to housing civic and cultural events.

2. SENSE OF PLACE. San Francisco is a regional epicenter for ecological, economic, and cultural diversity. Open spaces should aim to build on our City's intrinsic qualities, both natural and cultural, and to reflect the values we place on cultural diversity and biodiversity. Furthermore, they should create a network that inspires a deep connection to place.

3. EQUITY & ACCESSIBILITY. Open space and recreational programs should be equitably distributed. They should provide access for all residents, workers and visitors, and work towards a democratic network that includes all neighborhoods.

4. CONNECTIVITY. San Francisco's network of open spaces should be wholly connected. The open space system should facilitate non-motorized movement, link diverse neighborhoods, be easy to navigate and understand and, where feasible, enhance habitat through connectivity.

5. HEALTH & SAFETY. Open space should increase the City's capacity to be a safe and healthy place to live. Its design should promote social interaction, wellness, and a healthy lifestyle by providing opportunities for physical, cultural and social activities, and a connection to nature.

6. ECOLOGICAL FUNCTION & INTEGRITY. With environmental sustainability as a driving theme, the quantity and quality of natural systems in the City should be preserved and expanded, by promoting aquatic and terrestrial biodiversity, by designing for watershed health, and by implementing environmental, ecological and conservation-minded strategies.

7. SUSTAINING STEWARDSHIP. San Francisco's community members should be actively engaged as participants in its future. Policies should work towards shared, continued stewardship that increases the tangible link between community members and their open space network. Partnerships between public agencies, private business, and community based non-profits, and individual members of the community to foster pride, purpose and community should continue to be developed.

Related Plans and Agency Programs

The Recreation and Open Space Element, along with its related components that make up the City's overall Open Space Framework, aims to provide the elements needed to strive towards San Francisco's goal of a comprehensive open space network: a broad vision, a policy context, and a tangible task list for moving forward. The City also maintains several policy documents, plans and programs that provide direction about specific open space and recreational components, or to certain parts of the City. These include:

Street Park Program

Street Parks is a partnership between San Francisco Parks Alliance and the San Francisco Department of Public Works (DPW) to support the development and maintenance of community-managed open spaces on DPW owned properties, such as streets, stairways, sidewalks, median strips, traffic circles, and vacant lots. Improvements can range from sidewalk landscaping to median plantings to creation of mini-parks in unpaved street right-of-ways and in traffic circles. The program provides technical support on how to accomplish such projects, organizing seminars to assist in building a budget, and can provide matching funds.

Better Streets/Public Realm Planning

The City's Better Streets Plan, adopted in 2010, states that the City's rights-of-way should be "attractive, safe and useable public open space corridors with generous landscaping, lighting and greenery", providers of habitat for urban wildlife, and that they should invite multiple uses, including recreation. The Better Streets Plan provides a set of standards, guidelines, and implementation strategies to govern how the City designs, builds, and maintains its pedestrian environment. A number of public realm planning efforts implementing the principles of the Better Streets Plan are underway.

Community and Area Plans

A number of neighborhood-based planning efforts have been completed or are underway throughout the City. Each neighborhood plan seeks to increase the livability of several of San Francisco's urban neighborhoods by tapping the benefits of growth as a way to build more balanced neighborhoods. Most include capital improvement plans that draw from and build upon the policies of this Element to address a range of neighborhood needs including recreation, open space, and an improved public realm.

Waterfront Plan

The Port of San Francisco's Waterfront Plan (originally referred to as the Waterfront Land Use Plan) was initially adopted by the Port Commission in 1997, with an updated version adopted in 2023, defining acceptable uses, policies and land use information applicable to all properties under the Commission's jurisdiction. The Waterfront Plan defines locations for new public-private partnership projects coordinated with major public open space, park and recreation areas, maritime, and historic preservation improvements along the waterfront.

Office of Community Investment and Infrastructure, (Former Redevelopment Agency), Open Space Planning

The Office of Community Investment and Infrastructure, which is the successor agency to the Redevelopment Agency, created a significant amount of open space in its project areas, with more in the planning stages. New parks have been developed at Golden Gateway, in the Western Addition, Yerba Buena Center, Bayview Hunter's Point, Rincon Point - South Beach, Mission Bay, and Transbay. These spaces are currently being managed by the Office of Community Investment and Infrastructure and a number of different city agencies.

Golden Gate National Recreation Area (GGNRA) Planning Efforts

The GGNRA encompasses a number of open space and parklands throughout Marin, San Mateo and San Francisco, including Alcatraz Island, Crissy Field, the Presidio and the majority of the City's public beaches. A major planning process was completed by the SPUR for Ocean Beach to examine ways to manage coastal processes that drive erosion, ensure the future of critical infrastructure, protect natural resources, and activate and enhance the beach to best serve the local and regional populations.

Significant Natural Resource Area Management Plan

The San Francisco Recreation and Parks Department (SFRPD) has developed a Significant Natural Resource Areas Management Plan (SNRAMP) to address the restoration and management of the remaining elements of San Francisco's original ecosystem. The SNRAMP is implemented by the Natural Areas Program, a division in the Recreation and Park Department, and its goal is to restore and enhance remnant natural areas of the City, while also developing and supporting community-based stewardship of these areas. The program also includes a number of volunteer opportunities to engage students, businesses, groups, and individuals in the stewardship of San Francisco's natural lands.

Association of Bay Area Governments Bay Trail Plan and Bay Area Water Trail Plan

The Bay Trail Plan, adopted in 1989, includes a nine-county , 400 mile regional hiking and bicycling trail around the perimeter of San Francisco and San Pablo Bays. The Plan was prepared by the Association of Bay Area Governments pursuant to Senate Bill 100, which mandated that the Bay Trail:

- Provide connections to existing park and recreation facilities,
- Create links to existing and proposed transportation facilities; and,
- Avoid adverse effects on environmentally sensitive areas.

The San Francisco Bay Area Water Plan, adopted in 2005, was developed to create a network of launch and landing sites, or "trail heads". Such network would allow people in human-powered boats and beachable sail craft to enjoy the historic, scenic and environmental richness of San Francisco Bay through continuous, multiple-day and single-day trips on the Bay. The trail will promote safe and responsible use of the Bay, while protecting and increasing appreciation of its environmental resources through education and coordinated, and strategic access to the Bay.

San Francisco Blue Greenway Planning and Design Guidelines

The Blue Greenway Planning and Design Guidelines (draft released in 2011) catalog the open space network along San Francisco's Southeastern Waterfront, identify future open space opportunities; designate roadway designs for streets that link the open spaces, and prioritize improvements between neighborhood connections to the waterfront system of open spaces. In addition, it establishes design guidelines for signage and site furnishings along the entire length, identifies funding for Port projects and outlines a process for continued interagency coordination.

The Climate Action Plan (CAP)

The 2021 San Francisco Climate Action Plan sets forth a set of actionable and measurable strategies that not only charts a pathway to achieve net-zero greenhouse gas (GHG) emissions, but also works toward addressing racial and social equity, public health, economic recovery, resilience, and the provision of safe and affordable housing to all. Integral to these strategies is improving San Francisco's parks, natural open spaces, and rights-of-way. The Plan includes several strategies addressing Healthy Ecosystems, including: restore and enhance parks, natural lands, and open spaces; maximize trees throughout the public realm; and increase greening and integration of local biodiversity into the built environment. The CAP provides specific targets and milestone, calls for ongoing monitoring to ensure critical measurement of progress, and allows for adjustments based on changing conditions.

San Francisco Recreation and Parks Department Project Standards and Design Guidelines

The Project Standards and Design Guidelines were created to ensure a well maintained and actively used park system that supports the long-term health of people, plants, and animals. Recognizing that management practices have impacts beyond park boundaries, SFRPD developed the Standards and Guidelines to adapt to and preserve local systems through sustainable design of open spaces and facilities, and maintenance procedures. These practices include the use of proven sustainable materials and technologies.

OBJECTIVES AND POLICIES

OBJECTIVE 1

ENSURE A WELL-MAINTAINED, HIGHLY UTILIZED, AND INTEGRATED OPEN SPACE SYSTEM

The City's goal is to make the very most of the open space assets that San Francisco's robust system already provides. Well-maintained, highly utilized, and integrated open spaces are hallmarks of a unified and connected open space system with diverse programming, numerous amenities, and regular maintenance. Offering a diverse range of active and passive recreational opportunities in the City's current recreation and open spaces would help better utilize existing resources and encourage access for diverse users and activities.

POLICY 1.1

Encourage the dynamic and flexible use of existing open spaces and promote a variety of recreation and open space uses, where appropriate.

San Francisco has a variety of high-quality open spaces, where diverse types of users can engage in a myriad of activities—children can play, seniors can linger on benches and socialize, people can exercise and enjoy nature, and families can gather for a picnic. San Francisco's open spaces vary in their form and function: from smaller local green streets, pocket parks, plazas, and community gardens; to neighborhood parks, playgrounds, sports fields, and recreation centers; to large regional-serving parks such as Golden Gate Park and special destinations such as Camp Mather. To ensure vibrant parks and open spaces the City should deploy a diverse range of opportunities, including the following options:

- Provide recreational opportunities, both active and passive, that respond to user demographics and emerging recreational needs.
- Include innovative community-driven uses such as food production, education, and improved streetscaping.
- Design open spaces that include both active programming and passive uses in tranquil spaces.
- Provide programming for healthy and active lifestyles.
- Add user amenities such as concessions that cater to and attract visitors.
- Expand opportunities for temporary uses such as festivals, art, performances, and farmers markets.
- Allow active engagement with natural areas through public access trails, wildlife observation, birding, and educational displays and programs.
- Increase cultural programming and activities based on neighborhood need and interest.
- Provide spaces and structures that

Some of the City's open spaces and recreational facilities are underutilized and need additional programming and activation to address community interests and needs. These underutilized spaces offer a tremendous opportunity because the space is already owned and operated by the City. Such locations would in most cases require minimal renovation to take full advantage of the space. These open spaces and recreational facilities should be redesigned or re-programmed to better serve the needs of the surrounding neighborhood,

while ensuring a flexible design to adapt to changing neighborhood needs over time. Some types of public spaces that have traditionally been overlooked can offer additional opportunities for innovative and community-driven strategies for activation – wide sidewalks and traffic medians can be considered for community gardens, and parking lots and other spaces can support temporary festivals and farmers markets. There also are events large and small, such as fairs, concerts, and sporting events, that occur annually or on a recurring basis in parks and open spaces throughout the City. These events are often well-attended and enjoyed by many residents and visitors. In some cases the draw of these events provides the first exposure for many people to the City's diverse parks and open spaces. The City should continue to evaluate how these events impact the open space itself and on the surrounding neighborhoods.

POLICY 1.2
Prioritize renovation in highly-utilized open spaces and recreational facilities and in high needs areas.

Many of the City's open space and recreational facilities support a high intensity of uses. These spaces clearly provide a welcome respite for residents and visitors, but they are often so heavily utilized that more frequent maintenance is necessary to keep up with their heavy usage. The City should perform user studies and collect usage data to assess which of the existing recreation and open spaces are the most highly used so that those spaces may be targeted for renovation and improvement. Renovation of resources also should be prioritized in "high needs areas," defined as areas with high population densities, high concentrations of seniors and youth, and lower income populations, that are located outside of existing park service areas(See *Map 7: High Needs Areas: Priority Renovation & Acquisition Areas* and Policy 2.1).

POLICY 1.3
Preserve existing open space by restricting its conversion to other uses and limiting encroachment from other uses, assuring no loss of quantity or quality of open space.

The shortage of vacant sites and the intensity of development in San Francisco produce pressures on the City's public open spaces, sometimes putting spaces at risk of conversion to uses not serving the public purpose of respite and recreation. These same factors generate considerable public demand for access to open spaces. It is essential that the City protect its public open spaces from conversion to other uses, which threatens the overall integrity of the open space network.

Outdoor space in parks and playgrounds should not be diminished except in very unique cases. Yet, despite general agreement on the need to preserve public open space, developments may indeed be proposed on public land designated as open space. It is anticipated that the most persuasive arguments in favor of development will be based on the "public value" of the proposed development. The public value will differ among proposals, and a determination of this projected value as compared the potential open space benefit will be difficult and must be subject to rigorous public scrutiny. In order to assist in this determination when proposals for new development occur, the following provisions should be applied:

1. Proposals for Non-recreational Uses on Recreation and Park Department Land:

Decisions related to non-recreational uses on RPD land shall conform to the San Francisco Charter Section 4.113. The Charter requires a vote of the electors for park property to be sold or leased for non-recreational purposes or to build any structure for non-recreational purposes on park property. The Charter also notes that the Recreation and Parks Commission, with the approval of the Board of Supervisors, may use subsurface space for parking or other uses that would not be detrimental to the original park purpose.

2. Proposals for Permanent New or Expanded Recreational and Cultural Buildings, and Supporting Facilities on Recreation and Park Department Land:

A properly balanced recreation system combines both indoor and outdoor spaces and programs. Indoor recreational facilities are as important as outdoor space in a well-integrated park system. New indoor recreation facilities may be necessary to respond to local community needs, changing demographics of many San Francisco neighborhoods, and shifting maintenance requirements. Additionally, amenities that serve users of recreational facilities and open spaces – such as bicycle rental stands, cafes, and kiosks – can help provide services that enable and attract more people to visit and use underutilized open spaces and spend more time there. Culture is also an important aspect of community recreation; cultural facilities such as libraries or community spaces can support and enhance the existing park system. Proposals for such facilities or uses should be carefully evaluated to ensure the proposed location is optimal and appropriate. Decision-making bodies should consider the following criteria in making their determinations on such proposals:

- Facility directly serves and improves the existing open space by supporting better utilization of space while continuing to provide public access and respond to the needs of the local community.
- Facility is limited in size. The size will vary by open space, but the size shall be limited to the smallest footprint appropriate and feasible for the proposed use, taking into account the intensity of use, expected participants and spectators, as well as other relevant factors.
- Facility incurs limited impacts on the existing open space (because of a preponderance of nearby outdoor open space or other factor), or the projected public benefits outweigh the impacts.
- A clear rationale exists for siting the facility, articulating the advantages of the proposed site compared to reasonable alternatives.

Aloss of open space resulting from approval of the proposed facility generally should be offset with replacement open space of equal or higher quality. This new open space can be provided through a variety of ways, such as the removal of existing non-utilized structures, the acquisition of new space, or rearrangement of existing recreational and open space uses to better integrate these uses and the proposed facility. Maintenance facilities, restrooms, and other park-supporting facilities owned and operated by the Recreation and Park Department that are necessary for the maintenance of parks are exempt from these requirements.

3. New and Expanded Facilities in Non-RPD Open Spaces:

Many of the City's current and potential open space sites are under the jurisdiction of public agencies other than the Recreation and Park Department ("RPD") - including the Port of San Francisco (the Port), the SFPUC, the Office of Community Investment & Infrastructure, and the Department of Public Works. These spaces include parkland, shoreline access, reservoirs, grounds of public institutions, streets, alleys, and undeveloped street rights-of-way, and are shown in *Map 3: Existing and Proposed Open Space*. In some cases, these non-RPD-owned sites are intended for public uses other than recreation and the site's role as open space is secondary to the primary use. Yet their role as open space is important, as they supplement playgrounds and parks and are a major visual asset.

New facilities related to that primary use, or expansions of various types of supporting facilities may be requested. These proposed facilities may be necessary to perform the public function of the particular land-owning agency. Decision-making bodies should analyze all of the following criteria in making their determinations on such proposals:

- Facility is necessary to provide the public service or operations of the agency holding the site in question.
- A clear rationale exists for siting the facility, articulating the advantages of the proposed site compared to reasonable alternatives.
- Facility incurs limited impacts on the existing open space (because of a preponderance of nearby outdoor open space or other factor), or the projected benefits outweigh the impacts.

Upon approval, the city may request the sponsoring agency to meet certain design criteria and performance standards that ensure conformity with the General Plan.

MAP 3 - Existing and Proposed Open Space

Removing non-recreational uses

In keeping with the overall policy goal of limiting encroachments, the City should also pursue eliminating non-recreational uses in its public open spaces. In the past, parks and playgrounds have been used as sites for public facilities such as fire and police stations, sewer plants and schools. Undoubtedly, the public need for them was great at the time of their construction and many are still essential. But as non-recreational facilities such as these require maintenance, the City is faced with the decision to renovate them or to relocate them altogether.

Where it is possible to provide services elsewhere, the City should demolish the facility so as to return the site to open space use. If the facility can be successfully converted to recreational use, then reuse could be an alternative to demolition. The City should not, however, permit the reuse of such facilities for other non-recreational purposes. The same policy should apply to the reuse of obsolete recreational facilities.

Temporary Structures

Temporary structures are often needed for different events, and in the case of natural disasters, our parks serve as temporary evacuation space. Therefore, all temporary structures (i.e. all structures that do not have in-ground footing attached to the structure) in compliance with the City's permit process are exempt from the above requirements. Use of such structures beyond their original intent, however, would be subject to the criteria explained earlier in this policy.

POLICY 1.4
Maintain and repair recreational facilities and open spaces to modern maintenance standards.

Maintaining open spaces and recreational facilities at a high level of quality will help ensure that they are well-utilized and enjoyed. In order to maintain this goal, the City should continue to employ well-trained staff, such as gardeners, arborists, electricians, plumbers and other tradespeople to maintain our open space system and recreational facilities.

However, maintaining the City's existing recreation and open space system in a good condition continues to be a challenge due to intensive use, facility age, and a high number of sites. The City has diminishing resources devoted to general maintenance and upkeep. The city, especially for private and supplemental spaces, should continue to explore creative partnerships to meet maintenance goals of parks and open spaces, including those within the jurisdiction of other agencies, such as the Port or National Park Service. Where feasible and in keeping with the City's goal of providing well-maintained spaces the City should continue to seek alternative maintenance

methods, such as working with non-profit stewards, or developing alternative maintenance agreements. Similarly, where open space is maintained by entities other than the City, such as the National Park Service, the City should advocate for ongoing maintenance of such facilities, particularly when such facilities fall into disrepair and become unusable.

The Recreation and Parks Department owns a significant portion of the City's open space system. With over 220 parks and 3000 acres of parkland, RPD requires significant resources to keep the system in good to excellent condition. However, even as RPD continues to seek additional funding sources to address these needs, maintenance continues to be a problem due to rising costs and limitations on staffing and equipment.

RPD now evaluates parks on a quarterly basis and in addition the City Controller's Office provides an annual report on the state of the City's parks. Further, RPD uses a facility lifecycle management database to prioritize the RPD's deferred maintenance needs. The reports have helped direct RPD management and City resources to address maintenance needs. The City should continue to analyze maintenance needs by using these reports and other sources as data from users throughout the recreation and open space system to ensure the maintenance standards are met and funding is adequate.

POLICY 1.5
Prioritize the better utilization of McLaren Park, Ocean Beach, the Southeastern Waterfront and other underutilized significant open spaces.

Some of the City's large signature spaces offer a special opportunity to provide multifunctional open spaces that serve a diverse set of users. In particular:

McLaren Park

McLaren Park is a citywide resource due to its large size, varied landscape, and the specialized activities and programs located within the park. At the same time, it is located in an area of the City with one of the highest concentration of children, youth, seniors, and low-income households. McLaren Park should offer uses which satisfy the recreation needs of adjacent neighborhoods as well as meeting the needs of the city. The McLaren Park Master Plan was originally written in 1983, updated in 1996, and most recently updated with recommendations in the 2010 McLaren Park Needs Assessment and published the McLaren Park Vision Plan in 2018. The City should ensure that the objectives and priorities of the Master Plan provide effective guidance for the needs of the park today.

Development of the park should capitalize on the site's natural conditions, including topography, existing native vegetation, and views, in compliance with RPD guidelines. New plantings should be added to provide habitats and windbreaks, to define sub-areas of the park, and to provide colorful and attractive visual accents. Plant species should be hardy, wind- and fire-resistant, and provide for and enhance wildlife habitats.

In an effort to increase park use, the City should continue promoting events that attract visitors to the Park. For example, Jerry Garcia Day, an annual festival held in honor of the local musician, draws thousands of visitors to the park. Revenues generated from such events could fund maintenance of and improvements to recreation facilities and open space.

The City should consider a number of improvements to McLaren Park. Existing traffic conditions should be examined to reduce conflicts between vehicles and park users. The City should investigate the feasibility of improving the existing right of way in the park to allow for safe pedestrian, vehicular and bike access where appropriate and converting those areas to recreational use. The existing trail system should be retained and improved by completing missing linkages. Any new development should build on the existing infrastructure including roads and parking areas, the irrigation system and drainage structures, and lighting and electrical installations. Infrastructure that is damaged should be replaced within the existing network, channel or path. New recreation areas should serve active, as well as passive, non-organized recreation needs, that respond to a wide spectrum of park users.

Ocean Beach

Ocean Beach offers a vast, unbroken expanse of natural open space that is one of the longest urban beaches in the country. The area historically served the growing San Francisco population with the Sutro Baths, the Cliff House, the Fleishhaker Pool, and an amusement park, but now suffers from erosion and a lack of amenities. At the same time, Ocean Beach is annually visited by as many as three million people for activities such as walking, picnicking, sunbathing, jogging, dog walking, surfing, fishing, and simply enjoying the natural beauty.

Ocean Beach faces significant obstacles to fulfilling its potential as a great public space at the city's edge. First, critical components of the wastewater infrastructure are located near the beach, with some elements that are threatened by erosion. Coastal management to protect infrastructure, ecological resources, and public access is a complex challenge. The erosion is likely to worsen as climate-related sea level rise accelerates. In addition, Ocean Beach is administered by a host of Federal, State, and Local agencies, including the National Park Service[1], the SF Recreation and Park Department, the San Francisco Public Utilities Commission, and the State Coastal Commission.

A non-binding Master Plan for Ocean Beach has been developed by a project team led by San Francisco Planning and Urban Research (SPUR) and incorporating input from an interagency Steering Committee, Planning Advisory Committee (PAC), Technical Advisors and the general public. The plan addresses the complex challenges faced at the coastline, including severe erosion, jurisdictional issues, a

diverse array of beach users and points of view, and the looming challenge of climate-induced sea level rise. It presents recommendations for the coastline and how it should be managed and protected for the stretch from the Cliff House to Fort Funston, spanning roadway changes, bike and pedestrian connectivity, technical interventions, and ecological restoration.

To help address the issues described above, the SFPUC, in partnership with other agencies, is implementing the Ocean Beach Climate Change Adaptation Project for the southernmost portion of the beach and surroundings. The Adaptation Project builds upon several previous efforts including the Coastal Protection Measures and Management Strategy for South Ocean Beach (2015) and the Ocean Beach Open Space Landscape Design (2017). Project elements include, but are not limited to, managed retreat, structural protection, access and recreation improvements, and beach nourishment.

1. Most of the beach is GGNRA property.

Southeastern Waterfront/The Blue Greenway

The Blue Greenway is a project to improve and expand the public open space network along the City's central and southern waterfront from China Basin Channel to the San Francisco County Line. Collectively, the Blue Greenway is intended to provide opportunities for much-needed open space that is easily accessible for exercise and recreation, including bicycle and pedestrian access, recreational uses in the water, (e.g. kayaking), access to historical resources, and enjoyment of art as well as waterfront public access from nearby neighborhoods. The plan realizes objectives set forth in the Association of Bay Area Government's (ABAG) Bay Trail Plan and the Bay Area Water Trail Plan. High priority should be given to the project's completion as it will provide a much-needed open space system that is easily accessible for exercise, recreation and enjoyment of art and open space in the City's southern and central corridor. (See *Map 8: Blue Greenway* and Policy 2.4)

POLICY 1.6
Support the continued improvement of Golden Gate Park while preserving the beauty of its landscape.

Golden Gate Park is San Francisco's largest and one of its most important parks, with over 1,000 acres of open space and an estimated number of users topping 13 million annually. The park offers immeasurable opportunities to meet the needs of neighborhood, citywide and regional residents, and visitors from national and international destinations. The landscape design and natural legacy of Golden Gate Park are some of the many features that draw people to this park, and they would benefit from additional investment in restoration efforts. Many recently renovated and new facilities in the park, including the Conservatory of Flowers, the DeYoung museum, and the new California Academy of Sciences, have made the park increasingly popular. After ten years of community input, the City completed a 1998 Master Plan, a comprehensive plan that laid out landscaping, circulation, recreation facilities, buildings and monuments, utilities and infrastructure, maintenance, as well as funding for this signature open space. This Master Plan provides guidelines for continued improvements.

1. **Assess the Master Plan:** Many of the proposals in the Plan have been completed, while some remain unfinished. Golden Gate Park is one of the City's most important resources and a detailed assessment of the Master Plan should be completed to determine if the goals for the Master Plan have been implemented. In the long-term, the City should work with the community to determine if this Master Plan should be updated.

2. **Improve pedestrian access to Golden Gate Park:** Current pedestrian access around and to Golden Gate Park is highly limited, with sidewalks entirely lacking along one side of Lincoln Avenue, and limited formal pedestrian access points into the park. The City should consider a long-term goal of improving pedestrian access into the park and along its edges and discouraging entering the park on improvised trail entrances, which harms the flora in the Park. In response to the Master Plan's recommendation for a comprehensive signage system, signage standards were developed and many new signs have been added to the Park.

3. **Discourage automobile traffic:** The increasing popularity of the Park has also brought an increase in users. The City should continue to pursue alternative transportation to and within the park and examine both incentives for alternative transportation and disincentives for automobile traffic. The City should study potential options for improving the pedestrian experience, including considering roadway improvements and redesign(such as the cross-park tunnel that is incorporated in the Doyle Drive project at the Presidio) to improve safety and enhance views.

POLICY 1.7
Support public art as an essential component of open space design.

Art plays a critical role in both activating spaces and indicating to passersby that the space is public. The public requirement for art, originally passed in 1969, established the importance of monumental art integrated within public projects. This ordinance, currently titled the Art for Enrichment program, requires two percent of the construction cost of civic projects, including buildings, transportation projects, and new parks to be spent on public art for civic projects.[2] In 1985, the Downtown Plan required certain private projects to spend one percent of the project's worth on the provision of public art. This requirement was expanded to other areas the city in a new Ordinance in 2012.[3] In order to promote art in public and open spaces, the City should continue to evaluate the possibility of expanding

this requirement to other areas in the City. These projects vary greatly in their style and substance, from murals to monuments, but they have in common the ability for the public to access them. When parks or open spaces are renovated or new spaces are built, public art should be placed where it's both visible and appropriate given the parkland or open space.

2. For additional detail, See San Francisco Administrative Code, Section 3.19.

3. For additional detail, See San Francisco Planning Code, Section 4.29.

POLICY 1.8
Support urban agriculture and local food security through development of policies and programs that encourage food production throughout San Francisco.

The benefits of urban agriculture include increased access to healthy fresh food, a closer connection between residents and their food system, and opportunities for community-building and beautification. The growing movement to increase urban agriculture should be supported on both public land and on private spaces where possible. Currently, a huge and unmet demand for more community garden space exists in the City. Urban gardens should be permitted and promoted in public open spaces. To promote this goal, the Mayor's 2009 Executive Directive on Healthy and Sustainable Food encourages food production within the City and requires departments to identify public land for food production. City practices should support the work of organizations promoting urban agriculture, and explore ways to increase their access in new housing developments, existing publicly managed housing developments, and other public lands. The City should continue to make it a priority to find additional public spaces to meet this need. The City's Administrative Code also calls for comprehensive programs, policies, and strategies to generally enhance and increase urban agriculture uses. The City should also incentivize creation of community agriculture on private sites, such as private yards and building rooftops. Activities that allow distribution of locally grown food, such as farmers markets, Community-Supported Agriculture (CSA) distribution sites, or even direct sales of local and large-scale urban agriculture, should be considered a valuable part of activating underutilized public and private open spaces.

POLICY 1.9
Preserve sunlight in public open spaces.

Solar access to public open space should be protected. In San Francisco, presence of the sun's warming rays is essential to enjoying open space. Climatic factors, including ambient temperature, humidity, and wind, generally combine to create a comfortable climate only when direct sunlight is present. Therefore, the shadows created by new development nearby can critically diminish the utility and comfort of the open space.

Shadows are particularly a problem in downtown districts and in neighborhoods immediately adjacent to the downtown core, where there is a limited amount of open space, where there is pressure for new development, and where zoning controls allow tall buildings. But the problem potentially exists wherever tall buildings near open space are permitted.

Properties under the jurisdiction of the Recreation and Park Department or designated for acquisition are protected by a voter-approved Planning Code amendment. It restricts the construction of any structure exceeding forty feet in height that would cast a shadow that is adverse to the use of the park from between one hour after sunrise to one hour before sunset, unless it is determined that the impact on the use of the space would be insignificant. In determining whether a new shadow cast by a development is adverse to the use of a particular property, the City considers several quantitative and qualitative criteria, including the size of the park property, the amount of existing shadow, and the timing, size, location, and duration of the new shadow and the public good served by the building.

The City should support more specific protections elsewhere to maintain sunlight in these spaces during the hours of their most intensive use while balancing this with the need for new development to accommodate a growing population in the City.

POLICY 1.10
Ensure that open space is safe and secure for the City's entire population.

Safety and security in the City's open spaces is essential to allow San Franciscans to enjoy their community open spaces. Improving the design of an open space through design treatments can reduce the fear of crime and the actual level of crime. Design treatments can include:

- Providing clear sightlines, where appropriate.
- Designing the street/open space interface to encourage permeability and access.
- Ensuring adequate and appropriate lighting.
- Better utilizing parks and open space to increase park visitors and encourage "eyes on the park."

POLICY 1.11
Encourage private recreational facilities on private land that provide a community benefit, particularly to low and moderate-income residents.

Outdoor space is not the only medium for physical activity. San Franciscans use indoor recreation spaces for activities like swimming, tennis, basketball, ping-pong, yoga, and general fitness and group classes. Private recreational sources, such as clubs and gyms, offer residents spaces to participate in such activities. In permitting new development, San Francisco should continue to encourage space for physical activity, including private recreational facilities in building projects to supplement those provided by the City.

Some private and non-profit recreational facilities act in a quasi-public manner. These may provide free or low-cost community access, supplementing existing City programs in underserved communities for active education, sports and recreational activities. Examples include the YMCA, Boys and Girls Clubs, and other community-based organizations. These types of facilities should be supported when they serve San Francisco residents, and, if removed, the loss of recreational space they provide should be considered.

For-profit recreational facilities can offer similar educational and recreational benefits, provided the participant can pay. Examples include country and tennis clubs, yoga studios, and private gyms. These facilities should receive support, based on the level at which they can demonstrate they are meeting underserved low and moderate income need. Such facilities should be encouraged to offer neighborhood discount or “community class” rates to improve access for community members that are not able to afford full rates. The City should also look for opportunities to partner with such private organizations, to provide benefits to the public at a lower cost.

POLICY 1.12
Preserve historic and culturally significant landscapes, sites, structures, buildings and objects.

Historic resources are an important element of our park system. The value of these resources should be preserved and celebrated because they provide an important link to the significant events, people, places or design that they represent.

POLICY 1.13
Preserve and protect character-defining features of historic resources in City parks, when it is necessary to make alterations to accommodate new needs or uses.

The City should identify, evaluate, and preserve historic and cultural resources in City parks. Prior to any project that involves the alteration or replacement of any of these resources, the City should conduct a comprehensive survey and analysis to identify resources and associated character-defining features within the vicinity of the proposed project. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize the resource should generally be avoided. The replacement of historic and cultural resources and features should be avoided if possible.

OBJECTIVE 2

INCREASE RECREATION AND OPEN SPACE TO MEET THE LONG-TERM NEEDS OF THE CITY AND BAY REGION

In an urban area, the most critical factor in the provision of open space is its distribution. All types of open space activity - from sports fields to playgrounds - should be accessible to and within walking distance of every resident of the City. Walking distance, however, ranges depending on the type of activity and the resident. A half mile is commonly accepted as a distance that can be comfortably walked in 10 minutes, and as a distance most people are willing to walk to access community uses.[4] For most recreational activities, including active ones such as hiking, biking and sports activities; or for passive ones, like picnicking, this walking distance is acceptable. However, for activities that involve small children, such as a playground, one-quarter mile (a five minute walk) is more appropriate. Using these walking distances, and taking into account topography and other barriers, the City’s open space is generally well distributed, as illustrated in *Map 4: Walkability*.

4. Regional Plan Association (1997) Building Transit-Friendly Communities A Design and Development Strategy

MAP 4 - Walkability

However, some parts of the City are still deficient in certain types of open space. The eastern side of the City has a lack of large open spaces. While certain areas are planned and zoned for Production, Distribution, and repair (PDR) uses and for maritime industries, other areas were recently rezoned to support additional residential development. The future population increase in these areas and throughout the City (See *Map 6: Areas of Potential Additional Population Growth, 2040*) will exacerbate current open space deficiencies.

Many parts of the City also lack playground space. Sports fields are well-distributed; however, capacity is limited and the demand for their use is often greater than what can be provided in neighborhood spaces.

Even in neighborhoods that have open spaces within walking distance, higher density and lower income populations may mean demand in these areas exceeds the capacity of local open spaces. As these communities continue to grow, open space improvements and acquisition are needed to maintain access to this limited resource. This objective, and the policies that follow, are aimed at addressing these deficiencies through new or improved open space provision.

POLICY 2.1
Prioritize acquisition of open space in high needs areas.

Throughout the country, safe, green open spaces are in short supply in dense communities, where low-income and minority populations tend to be concentrated, as well as large numbers of children and seniors. In the more densely populated, older areas of San Francisco, people often have less mobility and fewer financial resources to seek recreation outside of their neighborhood. People in less dense parts of the City may enjoy use of private yards and patios, while residents in denser neighborhoods may not have that option. Finally, studies have found that the need for a park as a restorative "oasis" is most critical in dense urban areas.

Priority for acquisition of new space to address open space inequities should be given to high need areas, defined as places where there is low access to open space (illustrated in *Map 4: Walkability*),a conglomeration of high density, high percentages of children, youth, seniors, and low income households (illustrated in *Map 5: Population Density, Household Income, Concentration of Children and Youth, Concentration of Seniors*), and in which the most growth is projected to occur between now and 2040 (illustrated in *Map 6: Areas of Potential Additional Population Growth, 2040*).[5] Future areas with adopted master plans or Redevelopment plans, such as Mission Bay, Park Merced, Hunters Point Shipyard/ Candlestick, and Treasure Island (See *Map 4D: Walkability: Proposed Open Spaces in Large Plan Areas*) have identified site specific open spaces and recreational facilities, along with funding and implementation strategies for those parks and recreation facilities. These proposed site-specific parks and open spaces would support the planned population growth and therefore these proposed parks are incorporated into the analysis as existing park spaces. Layering all of these factors results in *Map 7: High Needs Areas: Priority Acquisition & Renovation Areas*. This map and analysis should be updated periodically using updated decennial US Census data.

5. The Planning Department Land Use Allocation distributes projected housing and employment growth as determined by the Association of Bay Area Governments to 981 Traffic Analysis Zones (TAZ). These zones vary in size, from a block around downtown to several blocks in more outlying areas. The allocation of TAZ-specific growth is based on the current development pipeline (development projects under construction, approved or under review) and an estimate of additional development potential for each TAZ.

MAP 5 - Population Density, Household Income, Concentration of Children and Youth, Concentration of Seniors

MAP 6 - Areas of Potential Additional Population Growth (2040)

MAP 7 - High Needs Areas: Priority Acquisition & Renovation Areas

Recreation and Parks Department maintains an Acquisition Policy, as required by the City Charter (Section 16.107) and the Park Code (Section 13.02), aimed at facilitating acquisition of open space in high needs areas. The Acquisition Policy provides guidance to promote equitable recreational and open space opportunities through several criteria: location in High Needs Areas, available funding sources that may be leveraged, inter-jurisdictional cooperation, and community support. In order to maintain new acquisitions, the policy also acknowledges the need to identify and leverage resources for continued maintenance and operational support.

New acquisitions should continue to consider the composition of current and projected neighborhood populations. There are both demographic and cultural differences in how people use parks: preschoolers, school age children, teenagers, adults, and senior citizens have distinct open space needs that should be accommodated, that may also vary according to social and economic groups. Design of new spaces should rely on the specific needs and values of its user communities, by using a participatory community design process.

While open space acquisition should not be limited by the City's inability to maintain additional parkland, the City should recognize that acquisition will require an on-going commitment of additional resources for maintenance. In appropriate cases, the City should acquire the property and develop low cost maintenance techniques and programs for open space that are not used for intensive recreation, or should hold the land vacant until development and maintenance funds are available.

POLICY 2.2
Provide and promote a balanced recreation system which offers a variety of high quality recreational opportunities for all San Franciscans.

The City's goal is to ensure that all San Franciscans are within a reasonable walk from an open space with a range of active and passive recreational opportunities. To ensure the highest quality of recreational opportunities for its residents, the City must be able to respond to changing demographics, neighborhood demand, and emerging recreational trends as it plans for new or expanded recreation and open space. The recreation system should provide an equitable distribution of facilities and services and consistent hours of operation. It should also provide sufficient opportunities for populations who are frequent users of open space, such as seniors and children.

POLICY 2.3
Provide recreational programs that are responsive to community needs and changing demographics.

In 2010, SFRPD implemented a new recreation system that focuses on flexibility and responsiveness to changes within communities by providing appropriate programming based on community interest and demand. To stay up-to-date with current needs and interests, RPD routinely surveys their recreation program users. The results provide RPD with information to ensure that programs and services meet the existing needs of neighborhood residents and are on the cutting edge of emerging trends.

RPD also works with the Department of Children, Youth, and Their Families (DCYF) on their Community Needs Assessment, conducted every two years. RPD participates in the assessment as a service provider, and relies on this report to update its recreation programming in coordination with other surveys and assessments. RPD and the City should continue to provide innovative recreational programs that respond to changing community needs.

POLICY 2.4
Support the development of signature public open spaces along the shoreline.

The Pacific Ocean, San Francisco Bay, and their respective shorelines are important natural resources in San Francisco. They offer opportunities for water-oriented recreation, passive recreation, views, and habitat. Most of the property adjacent to the thirty-two mile shoreline is in under public ownership. Maintaining public access to the waterfront is integral to San Francisco's identity and creating continuous open spaces along the ocean and bay is one of the City's long-term goals. Much of the waterfront is already accessible to the public, through parks ranging from Fort Funston, Ocean Beach, the Presidio and Fort Mason to the urban waterfront of the Embarcadero, and numerous open spaces along the Piers to Candlestick Point State Recreation Area.

These open space opportunities should be enhanced and expanded by focusing on the development of several signature open spaces that draw people from their immediate neighborhoods and beyond. Key focus opportunities for developing new or enhanced signature open spaces on the waterfront are listed below by geographic area, and are identified in *Map 8: Blue Greenway*. Additionally, connecting these open spaces to the surrounding neighborhoods and throughout the City and region is an important goal and is discussed further in Policy 3.2.

MAP 8 - Blue Greenway

Northeastern Shoreline

Significant progress has been made in opening and improving the city's northern shorelines. With the opening of Crissy Field in the Golden Gate National Recreation Area and the retention of much of the open space in the Presidio as publicly-accessible open space, this area has transformed itself into a regional destination. Long-term, maximizing the recreational opportunities of other shoreline areas should be considered and inter-governmental and other partnerships should be pursued to further develop these opportunities. At the same time, existing facilities should be maintained at a level good repair to assure their ongoing usefulness.

In addition, a major opportunity exists to create an expanded, multi-park open space at the juncture of Market Street and The Embarcadero. The existing open spaces of Embarcadero Promenade, Justin Herman Plaza, and Sue Bierman (formerly Ferry) Park provide a wealth of untapped opportunity, which can be connected to function as a coherent link from downtown to the Ferry Building and the waterfront, holding several linked yet distinct activity and recreation spaces. Additionally, the Port has opened the Northeast Wharf at Pier 27, which includes a three acre plaza in front of a new Cruise Terminal at the base of Telegraph Hill, and a series of linked open spaces in the heart of Fisherman's Wharf.

Western Shoreline

The western shoreline has the advantage that it is already a long-stretch of natural and publicly-accessible open space. Ocean Beach is a national treasure and should be improved to acknowledge the significance of vast, unbroken expanse of beach in the City.

A non-binding Ocean Beach Master Plan has been developed by SPUR (a San Francisco non-profit supporting planning and good government in the Bay Area) in close coordination with responsible agencies. The Plan includes recommendations to improve and restore conditions at Ocean Beach by adapting proactively to the changing coastline. The western shoreline also connects to Lake Merced, providing opportunities for enhanced access to the waterfront and recreational opportunities. The SFPUC is undertaking several efforts, including implementing the Ocean Beach Climate Change Adaptation Project, to improve access to the watershed lands in this area. If additional space becomes available, this space should provide improved connections from the neighborhood to the waterfront.

Southeastern Waterfront

The continued development of Mission Bay, the passage of the Eastern Neighborhoods plans (Mission, East SoMa, Showplace Square/Potrero Hill, and Central Waterfront Area Plans), the approved developments at Mission Rock, Pier 70, the Potrero Power Station, India Basin, and the proposed Candlestick Point and Hunters Point Shipyard developments will bring growth, which will require increased access and open spaces throughout the Southeast. Most of these plans are accompanied by specific open space strategies for parkland along the waterfront, where active water-oriented uses such as shoreline fishing, swimming, and boating should be promoted. The 2018 Central Waterfront: Dogpatch Public Realm Plan includes additional, more specific recommendations for the Central Waterfront-Dogpatch Public Realm Plan area.

BLUE GREENWAY

The Blue Greenway is a project to improve and expand the public open space network along the City's central and southern waterfront, from the China Basin Channel to the San Francisco County Line (see *Map 8: Blue Greenway*). It provides a new vision of how parks and public spaces can be created to complement and connect with existing open spaces in this industrial mixed-use area along the Bay waterfront. The Blue Greenway seeks to both provide opportunities for much-needed open space that is easily accessible for exercise and recreation, including bicycle and pedestrian access, recreational uses in the water (e.g. kayaking and swimming), access to historical resources, and enjoyment of art, as well as improve waterfront public access from nearby neighborhoods. These goals realize objectives set forth in the Association of Bay Area Governments (ABAG) San Francisco Bay Trail Plan and Bay Area Water Trail for southeast San Francisco.

The following Blue Greenway projects should be given high priority as the neighborhoods along the Bay waterfront – which are already deficient in open space – continue to grow in population. These projects correspond with identified high needs areas. Some are longer-term, large-scale projects that will require public funding:

- **China Basin Shoreline Park:** This existing approximately two-acre park will be expanded as a part of the development of the Port's Sea Wall Lot 337 project and will be the northern gateway of the Blue Greenway.
- **Mission Bay Park System:** This 41-acre park system will include a large scale, bayfront park between the China Basin Shoreline Park and Pier 70, with an important Blue Greenway segment. These open space opportunities and projects are incorporated into the Office of Community Investment and Infrastructure's Mission Bay Redevelopment project.
- **Crane Cove Park:** This approximately seven-acre shoreline park within the Port's Pier 70 development area include construction of an aquatic center and interpretive educational information regarding the City's deeply rooted maritime history. In addition to Crane Cove Park, the Pier 70 site presents opportunities for a variety of other open spaces, all of which must be consistent with the industrial maritime character and setting of the site.
- **Pier 70 Development Project:** The waterfront development site is approximately 28 acres, which includes approximately nine acres of open space, including approximately four acres of open spaces along the waterfront that will incorporate historic shipbuilding infrastructure.
- **Potrero Power Station Development Project:** This approximately 23-acre parcel is the former site of the Potrero Power Plant, which is now planned for a major multi-phase mixed use development that will include significant amount of residential, office, laboratory, and other supportive uses. A major feature of the development is its 6.9 acres of waterfront and inland open space that will be coordinated with the adjacent Pier 70 multi-phase mixed-use development, as it provides an opportunity to extend waterfront access through the pier to Warm Water Cove.
- **Warm Water Cove:** This isolated park has the opportunity to be improved and expanded by up to three acres to provide access to the City's Eastern shoreline and to provide recreational opportunities to the growing population. The 2018 Central Waterfront-Dogpatch Public Realm Plan includes concept designs for this site to guide future expansion and enhancements.
- **Islais Creek Improvements:** This project may consist of shoreline improvements, including rebuilding dilapidated wharves, removing ghost piles, and providing for open space system linkages to expand public access and recreational water use of Islais Creek. In August 2021, the City and the Port published the Islais Creek Southeast Mobility Adaptation Strategy (ICSMAS), which examined the Creek and its surrounding neighborhood's flood hazard risks and identified a comprehensive suite of possible adaptation pathways to protect the area and its key public assets from flooding and permanent inundation.
- **India Basin:** The recently closed Hunters Point Power Plant and adjacent shoreline properties offers the opportunity to bring much-needed recreational space to the center of the City's southeast neighborhoods, helping address the health and environmental impacts of the plant's operations. Relatedly, RPD in embarking on a major redesign and enlargement of the India Basin Shoreline Park and India Basin Open Space that will, among other aspects, expand the area of the parks by incorporating new property at 900 Innes Avenue. The proposed India Basin multi-phase development, approved in 2018, will also contribute significant new open space area. Taken together, the new and improved open spaces from the Power Plant Site through India Basin and into the Shipyard are expected to create a network of diverse open spaces for the Bayview community and the City at large.

- **The former Hunters Point Shipyard, Candlestick Park and Candlestick State Recreation Area:** These areas form the southern terminus of the Blue Greenway. These open space opportunities and projects are incorporated into the Office of Community Investment and Infrastructure's Candlestick and Hunters Point Shipyard redevelopment project.

The City, including the SFRPD, the Port of San Francisco, and Office of Community Investment and Infrastructure, should continue ongoing planning efforts to improve connections and address any gaps amongst the various waterfront open spaces to create a linked system of parks that is consistent with the Blue Greenway planning efforts. In addition to signature open spaces, the City should consider new waterfront open space improvements that serve a non-recreational purpose, including climate change adaptive infrastructure. Current projections by the Pacific Institute predict that global warming may cause the ocean to rise as much as five and a half feet along California's coastline in the next 100 years, impacting many areas of the San Francisco Bay, including the shoreline areas, much of Mission Bay and adjacent portions of SoMa. Inclusion and restoration of open space, particularly tidal wetlands, can act as a natural buffer and play a key role in adapting to sea level rise. Wetlands can protect shorelines from storm surges while assisting in reducing carbon levels through sequestration, so wetland restoration and habitat enhancements should be considered for inclusion in all waterfront open spaces. While many of these areas are already developed, and therefore not appropriate for open space development at this time, ecosystem-based management principles and retrofits should be considered wherever possible to ensure that shoreline retreat and flood protection are considered as measures to assist in adapting to projected sea level rise.

POLICY 2.5
Encourage the development of region-serving open spaces in opportunity areas: Treasure Island, Yerba Buena Island, Candlestick and Hunters Point Shipyard.

Several large, underutilized sites within the City offer not only the opportunity for new mixed use development to meet the City's housing needs, but the chance to create new, large scale region-serving open spaces.

- **Treasure Island**, the former naval base just off the City's northeastern shoreline, is planned to reserve over 60% of its land area for open uses, ranging from parks and ball fields, to organic farms, to wetlands and tidal marsh. Combined with open spaces on contiguous **Yerba Buena Island**, its 290 acres of proposed open space will be planted with a diverse and healthy range of plants which will help offset the city's greenhouse gas emissions. As a part of the planning for the redevelopment of Treasure Island, a Habitat Management Plan was prepared to assure the protection and restoration of wildlife habitat and biodiversity on the adjacent Yerba Buena Island. It is critical that the final designs of open space on these two islands, taken together, provide not only a range of playgrounds and recreational areas to meet the new residents' activity needs, but also offer strong, permanent protections for their wetlands and natural habitat. Agriculture and biodiversity components of this Management Plan should be developed to serve as educational and cultural amenities for the City and the region.

- **Hunters Point Shipyard and Candlestick Point** are currently undergoing a transformation into a vibrant, urban neighborhood and livable green community. Candlestick Point currently consists of the 49ers stadium, parking lot and the Candlestick Point State Recreation Area, of which only about half is improved. Hunters Point Shipyard consists of a decommissioned Naval Shipyard currently undergoing remediation with very limited public access. Plans for the two areas call for a well-connected, full breadth of complimentary uses. A major feature of the project is the robust open space program including upwards of 325 acres of open space, roughly 220 acres of which is being developed at the Hunters Point Shipyard. While the plans call for some reconfiguration of the existing Candlestick Point State Recreation Area (CPSRA) as provided for by SB 792, the reconfiguration will help assure the full realization of currently underutilized portions of the State park. The waterfront open spaces within this project will be the southern section of the Blue Greenway.

Taken together, the new open spaces will enable a continuous Bay Trail along this southeastern portion of the City, and provide a wide range of shoreline-oriented recreational opportunities that could include boat launches, fishing piers, restored wetlands, picnic areas, and food services. The new open space system should be designed in coordination with the proposed adjacent new urban neighborhoods and improve connectivity to the Bayview community, greater San Francisco, and the rest of the region.

POLICY 2.6
Support the development of civic-serving open spaces.

San Francisco is a civic city— celebrations, rallies, gatherings and protests take place almost weekly; political speeches, music, performances in the open air are also common occurrences. Our identity is defined as much by expressions of our social and cultural goals as it is by our physical landscape. These regular events in San Francisco emphasize the role of our City as a regional stage where like minds can gather and deliberate.

San Francisco needs civic spaces which can accommodate these activities – weekly events like farmer's markets, annual events such as the Pride Celebration, and special events such as broadcasting presidential inaugurations. As the City grows, these spaces need to accommodate ever-larger crowds of people and different types of functions – from simple gatherings to technical showcases and wired events. The main opportunities to unify and bolster City landmarks and activity centers are focused around three major open spaces:

- **Civic Center:** Our existing Civic Center, surrounded by City Hall, the Main Library, the Asian Art Museum, and other civic spaces, hosts many of the activities described above. The Civic Center is part of the Civic Center Historic District with National, State, and Local designations. Civic Center's design, however, limits its capacity and functionality, with activities often spilling into less optimal public spaces such as nearby streets. The nearby UN Plaza provides additional activity space that is used for weekly farmers and craft markets, but the two spaces are generally underused outside of scheduled activities and are separated by a virtual parking lot along Fulton Street between Hyde and Larkin Streets. A series of connected open spaces, along a "Civic Center axis" from Market Street to City Hall, could be created with the development of a pedestrian mall along Fulton Street between the Main Library and Asian Art Museum, and with corresponding activity improvements to increase the usability of the Civic Center and UN Plazas. The Civic Center Public Realm Plan provides a blueprint for realizing these goals.

- **Embarcadero Open Spaces:** At the other end of Market Street, the numerous yet underutilized open spaces along the Embarcadero – Embarcadero Plaza, Justin Herman Plaza, and Sue Bierman Park- offer a glaring opportunity for synthesis into the City's gateway civic open space. Inspiration can be found in Millennium and Grant Parks in Chicago. Just as they serve as Chicago's front door, San Francisco needs a civic space for large outdoor events – a place where arrivals can be greeted by the vibrancy of the City, and where its citizens can gather for moments of great joy or great mourning. A series of linked outdoor "rooms" would enable the reconnection of Market Street to the Ferry Building, enhance visual connections to the Bay, activate public space edges with uses that draw people to inhabit and use the space, and create a series of distinct activity spaces for civic and news events, large gatherings, and performance space.

- **Market Street:** Market Street, San Francisco's premier street and most important destination, is more than the city's primary corridor for Downtown movement; it also acts as a civic and cultural center where people can gather to see, learn and participate in our city's vibrant life. The Better Market Street initiative is currently underway to enhance public life along Market Street with a memorable and active identity; more diverse range of social, cultural, and economic activities; and with more gathering spaces to visit, promenade and linger. These changes will complement the transit and bicycling improvements that are also an integral part of Better Market Street

- **Hallidie Plaza:** Hallidie Plaza is a prominent San Francisco public space. Many more people visit Hallidie Plaza every day than any other plaza in San Francisco because of its proximity to shopping, hotels, and theatres. Despite these attractive qualities, Hallidie Plaza has never met its potential to be a world-renowned space where residents and visitors alike come to meet. The multi-level design fractures the plaza, making it impossible to create a place at street-level that can accommodate any sort of meeting space. The Better Market Street Project included preliminary designs for Hallidie to suggest different directions the City could go. Further, there were several conceptual designs developed in the early 2000s that highlighted preferred elements for the plaza, but no definitive design. These should be used as the basis for a design competition, hosted by the Planning Department.

  Given the financial constraints San Francisco will continue to experience for the foreseeable future and the anticipated cost of fixing Hallidie Plaza, there will need to be a public-private partnership that brings philanthropic funding to match City contributions. Building the partnerships necessary to support the refurbishment of Hallidie Plaza should remain a high priority for the City so that the space can become a destination with iconic value to both San Franciscans and our many national and international visitors.

POLICY 2.7
Expand partnerships among open space agencies, transit agencies, private sector and nonprofit institutions to acquire and develop new open space, and maintain, improve, and manage existing open spaces.

Public agencies and private organizations and individuals are working to maintain open space in the Bay Area. These bodies include the Federal Government, the State of California, local governments, several sub-regional open space agencies, as well as public nonprofit organizations and private landholders. Preserving a regional open space system is beyond the scope of the seventy-odd local governments in the nine-county Bay Area. Valuable open spaces cross city and county lines and individual municipalities have neither the regulatory powers nor the funds to retain them. Preservation of such spaces will depend upon regional action.

The City should facilitate efforts of existing agencies and organizations working toward regional open space goals. The City should encourage and work with these groups to secure additional land for open space retention and management, and to maintain existing open space areas in their current undeveloped open space status. The City should also support use of selected areas of open space lands within its jurisdiction for appropriate recreational uses.

POLICY 2.8
Consider repurposing underutilized City-owned properties as open space and recreational facilities.

All major metropolitan areas face challenges in providing sufficient open space due to lack of available land. While vacant or underutilized sites may be found, they are in high demand for private commercial or residential development, driving competitive land prices which are often too expensive for public acquisition. In order to meet the City's need for new open spaces in these high needs areas, the City should creatively look at the resources it already has – sites already in public ownership.

Surplus Sites: Occasionally public agencies find some land surplus to their current and projected needs. When public land becomes surplus to one public use, San Francisco's Surplus Property Ordinance, passed in May 2004, requires the city's surplus property be considered for affordable housing. Some such parcels are not feasible for housing because of their size or shape. When surplus land is already zoned for open space, open space should take priority over other public uses, including housing. When other surplus land becomes available for review as open space, the City should evaluate its suitability as a park site based on suitability criteria described in Policy 2.1 and in RPD's Acquisition Policy while considering other public benefits the land could provide. If the analysis finds the property necessary for open space usage, the City should consider if and how to transfer the property to the Recreation and Park Department under the procedures determined in SFRPD's Acquisition Policy for jurisdictional transfers.

Publicly Owned Sites: The City should evaluate all publicly-owned sites in high needs areas (see summary *Map 7: High Needs Areas: Priority Renovation & Acquisition Areas*) to determine their feasibility for full or partial park site usage. Some of these sites may be underutilized and therefore available for purchase or swap—these should be reviewed for potential transfer to or purchase by RPD. Other sites may be currently utilized for valuable public purposes, but could offer opportunities for joint use. For example, public parking lots that are underutilized on weekends could serve as active recreational spaces during off-business hours, and could even be improved with reinforced turf systems that create greened parking areas. Public buildings could be evaluated for their potential to provide active roof space, which could be creatively developed as green spaces accessible to the public during certain hours.

The opportunity to create open spaces on neglected or overlooked city owned parcels should be explored, particularly in high needs areas – such designs could repurpose existing infrastructure in unique and exciting ways. For example, the award-winning Gas Works Park in Seattle is built on a former coal plant site. More recently in New York City, an abandoned elevated rail track was redesigned as the High Line park, a wildly successful public space that drew over two million visitors in its first year and earned several design excellence awards. The City should consider the innovative reuse of abandoned, vacant or excess city owned land of all shapes and sizes.

Public Rights Of Way: As described in Policy 3.1 below, numerous streets, alleys, schoolyards, and other rights of way offer potential for cooperative recreational use. City departments and State agencies, such as the Municipal Transportation Agency and Caltrans, own and operate spaces that could be better utilized to serve as open spaces throughout the city. Spaces under freeways could serve as skate parks and bicycle paths, while city-owned parking lots could be developed as open space.

POLICY 2.9
Address physical and bureaucratic barriers to opening schoolyards as community open space during non-school hours.

During school hours, schoolyards provide students with a space to learn, socialize, exercise and play. They also often provide the greatest expanse of open space available in their immediate neighborhood. But if the neighborhood cannot tap into that resource when the school day is over, the schoolyard becomes a lost opportunity for half its life. Opening these spaces for use during these times could provide much needed additional space in areas that are currently deficient in open space. This could prove mutually beneficial in that it could provide additional revenue for the school district and large new open spaces for residents without the high costs of acquiring new spaces.

In 2008, the San Francisco Unified School District (SFUSD) and the City launched a pilot program which opened eleven school yards to neighborhoods during weekend hours. This program has been successful in increasing community access to recreational space without any corresponding significant damage to school property. The program has continued to expand, to 21 schools in total, and offers many benefits to participating schools, such as open space improvements, grants to support physical education, gardening activities during the school day, and an activity fund to provide weekend activities open to the public. Schools receive maintenance, programming, and surveillance support from San Francisco Department of Public Works, San Francisco Recreation & Parks Department, and the San Francisco Police Department.

The City should consider ways to better market the availability of these spaces through multi-language signage and events in the space. Continued efforts to add greening to schoolyards would provide benefits to students as well as the neighborhood. As the program continues to expand, additional funding may be needed to address staffing, programming, and operational needs that come along with any joint use project. In addition, based on lessons learned from joint-use agreements thus far, the city should review and further codify the structure of its joint-use agreements to ensure consistency and ease of implementation.

The lessons from this pilot project could also be applied to other public or quasi-public sites. For example, as a next step the City could look at small branch libraries or child care centers as opportunities for increasing public access. The City should also approach private schools throughout the City and attempt to gain their support for such a program on their properties. Other cities have successfully established mutually beneficial joint use or development agreements that opened the privately-owned open space to the public. Private schools could use this vehicle as a way to be "good neighbors" that contribute to neighborhood needs, similar to private recreational facilities offering neighborhood discounts. Where liability is an issue, the City should look to equitably share liability with private entities or among multiple agencies.

POLICY 2.10
Improve access to and level of activity provided at San Francisco reservoirs.

The San Francisco Public Utilities Commission (SFPUC) owns and manages a significant amount of open space lands in San Francisco, as well as sites in Alameda, Santa Clara and San Mateo Counties. These lands are managed as watershed lands and serve as the city's major water source; in some cases these sites also serve as open spaces with scenic easements, and have recreational features such as playgrounds, walking paths, seating areas and even golf courses. The SFPUC has recently expanded uses on its lands to include sustainable agriculture and composting.

Because of the SFPUC's mission to protect public health and safety by ensuring water quality and the filtration capability of the existing system, these sites need to be carefully managed, and in some cases large-scale public recreational use is not possible given such constraints. However, increased public access to portions of its watershed lands with high recreational value is still possible, particularly on certain opportunity sites where the water quality would not be threatened.

Several of the SFPUC's treatment, tank or station sites may offer the potential to yield limited right-of-ways connecting proposed trails or greenways discussed elsewhere in this Element. Such connections, however, must be limited to pedestrian crossings, and made with consideration of safety of the underlying substructure and whether there is risk of potential degradation.

Future leases and lease renewals on watershed lands should be consistent with protection of existing natural values. Watershed lands should be managed to limit potential fire and erosion hazards. Access should be consistent with the legal rights of existing tenants, and with the intent of existing scenic and recreational easements.

The SFPUC should seek to increase public access to and enjoyment of surplus sites by seeking funding for site improvements, better access, and the ability to address safety issues at existing and potential open space properties.

In the case of reservoir lands outside of the City and County of San Francisco, the SFPUC has several long-standing agreements for the recreational, educational and agricultural use of its lands. These agreements have gone through extensive public processes and any change to the agreements would involve additional outreach and review. Some examples of successful joint-use of SFPUC lands include: Sawyer Camp Trail, one of the most popular trails in San Mateo County, which is located inside the Peninsula watershed and passes by the reservoir; and the Sunol Water Temple AgPark, an urban farm located on SFPUC land in Alameda County.



MAP 9 - School Yards & SFPUC Sites With Open Space Potential

POLICY 2.11

Assure that privately developed residential open spaces are usable, beautiful, and environmentally sustainable.

In order to improve living conditions in each residential building and the quality of environment in San Francisco as a whole, the City should continue to require that all new residential development provide outdoor open space. Current San Francisco Planning code requires a minimum amount of open space and this minimum must be maintained. However, open spaces should not only meet a minimum size requirement but should also be usable, quality recreational opportunities directly outside residents' front door, and they should also supplement any public open space that is provided nearby.

In single-family districts, rear yards are required and these yards provide much-needed open space for use by residents, natural habitat value, as well as stormwater management benefits. In most multi-family zoning districts, a minimum of 60-125 square feet per unit is required. In some areas such as Downtown, Chinatown, and high-density residential zoning districts, minimum open space requirements can dip as low as 36 square feet per unit. This requirement is too low, especially for areas that correspond with the high needs areas in *Map 7*. Comprehensive planning in these areas should consider if the requirements should be increased or how open space needs can be met with alternative methods.

In multi-unit developments, providing required open space as common space has many benefits. It provides a collective place for residents to gather, allowing residents to get to know their neighbors and fostering a sense of community. It also provides larger areas for explorative play for children, something small balconies and private spaces usually cannot provide. Finally, it can be more space-efficient than providing numerous smaller spaces, especially if placed on rooftops or adjacent to common entry points where space for access is already required. Common open spaces can expand these benefits to the broader neighborhood as well, if they are publicly accessible during safe times of the day, such as daylight hours, or if they contribute to scenery by being visible from the street. Therefore, open space requirements should include incentives to promote the provision of common open space, and publicly accessible common open space in particular.

The value of private open spaces rests largely on their design. Open spaces should be designed to relate to the type of development they support; while lower density districts may typically include ground level or rear yard gardens, higher density residential development can include not only rear yards or common courtyards at grade level, but also balcony, terrace and rooftop open space. Whatever type of open space is provided, it should be usable with landscaped areas that add greenery. Elements such as playground equipment, lawns, and gardens should be considered as well, based on the expected resident population of the project. Appropriate minimum amounts of open space and guidelines should be developed to codify these recommendations.

Open space in the downtown urban core is already very limited, and continued development will make meeting these higher requirements both more challenging and more necessary in order to maintain livability. Rooftop open spaces can provide a promising way to meet this challenge. Aside from the environmental benefits of roof greening – reduction of stormwater runoff, improvement in air quality, and reduction in energy used for building heating and cooling – green roofs can help to meet a number of the City's open space goals, from recreational enjoyment, to aesthetic improvement and greening of urban landscapes, to increased local food production and increased biodiversity. To enable quality roof space that provides these benefits, roofs should be constructed with load bearing capacity that can accommodate minimum soil depths for planting, or should at minimum support expected person occupancy and potted plantings. Design considerations also include safety, how the space overlooks neighboring properties, and where access can be provided.

POLICY 2.12
Expand the Privately-owned Public Open Spaces (POPOS) requirement to new mixed–use development areas and ensure that spaces are truly accessible, functional and activated.

In denser neighborhoods of the City, Privately-owned Public Open Spaces (POPOS) are a critical strategy to promote livability and provide much-needed spaces for relaxation, enjoyment of greenery, and socializing with others.

POPOS have been provided in a wide range of forms including outdoor seating with landscaping, to beautiful rooftop terraces, or indoor atriums. The quality of these spaces varies greatly, with some of them providing true oases with trees and planters and ample seating; while others are dark, tucked-away spaces that are accessible in name only. While this type of space can never replace true public open space, these spaces should be accessible to the public and should provide features to create a functional and pleasant open space. The City should deploy a variety of tools to educate the public of the existence of POPOS, especially in cases where such spaces are tucked away from the sidewalks—located on the building's rooftops or on the back of the building. The City should enforce all violations by existing POPOS, ensuring that they meet the conditions they were required to meet when the development was approved. The City should also reevaluate the guidelines provided in the Downtown Plan for required features of each type of POPOS, including seating, access to public restrooms, landscaping, and ecological functionality, to determine how to improve these open spaces. Additionally, the City should consider ways of allowing increased activation of the space and provide quality bicycle connections to these spaces.

POPOS have traditionally served the denser downtown core, a result of policies adopted in the 1980s mandating that new large commercial developments provide publicly-accessible open space. These policies should be evaluated to determine how POPOS requirements can be strengthened and expanded citywide. For instance, fee requirements could be extended to all types of development projects of a certain size (not just commercial uses) and provide an in-lieu fee option, as is the case in the Transit Center District Area Plan. Similarly, the Eastern Neighborhoods plan allows developers to satisfy some portion of private open space requirements by providing publicly accessible open spaces. Moving forward, POPOS requirements should ensure that such open spaces are designed and maintained to accommodate and attract a diverse range of users.

OBJECTIVE 3
IMPROVE ACCESS AND CONNECTIVITY TO OPEN SPACE

San Francisco is a dense, built-out city, where it may be difficult and expensive to acquire new land for parks and open spaces. Even though acquisition remains an important means to improve open space access, San Francisco's street network provides an untapped opportunity to supplement the city's open space system and link the network of open spaces. The street network, which makes up 25% percent of the City's total land area, is a valuable public space asset that can incorporate many types of open spaces, such as pocket parks, play streets, trails, and walkable streets and bike routes. These systems can connect residents to larger parks and open spaces and serve as restorative green spaces in their own right, places where residents can interact with urban nature on their doorstep. This system should be clearly legible, and include signage to guide pedestrians to and through the larger open space system.

POLICY 3.1
Creatively develop existing publicly-owned right-of-ways and streets into open space.

San Francisco's right-of-ways offer a variety of opportunities for developing open spaces. Streets can supplement traditional open spaces with standard streetscaping improvements such as bulb-outs, crosswalk improvements, tree planting, and pedestrian lighting. More extensive traffic calming on expanded or existing wide sidewalks can create additional pocket parks, sitting areas, and opportunities for sustainable plantings, community gardens, stormwater treatment, and other landscape elements.

Green Connections

Green Connections are special streets and paths that connect people to parks, open spaces, and the waterfront, while enhancing the ecology of the street environment. By increasing greening in the right-of-way with street trees, sidewalk gardens, and other landscaped areas, these streets will become sustainable corridors that enhance mobility, green neighborhood streets, and improve pedestrian and bicycle access to community amenities and recreational opportunities.

Living Alleys

The City's network of alleyways– small-scale, quieter streets that primarily serve vehicles needing access to adjacent properties—can provide vibrant open spaces, especially in dense neighborhoods. Some alleys, such as Belden Place in the financial district, are currently closed to traffic and provide an intimate atmosphere where patrons of adjacent restaurants can enjoy outside dining amidst a bustling urban environment. Other alleys, such as Maiden Lane, are closed during certain times of the day, serving adjacent businesses during the day, but allowing deliveries during the evening hours. Still other alleys, such as Linden Alley, are open to traffic, but carefully designed to ensure that drivers proceed slowly and with caution. These alleys are designed with seating, landscaping, and pedestrian-scale lighting to create useable and attractive open spaces. All three alley types should be considered and encouraged.

In some residential neighborhoods in the City, such as Visitacion Valley, Mission Terrace, Crocker Amazon and Bayview Hunters Point, there are narrow, unpaved alleyways that originally provided service vehicle access before paved roads were built. These abandoned and overgrown spaces can provide much-needed spaces that supplement the traditional open space, potentially providing walking and biking paths, or seating, landscaping, and lighting appropriate to the area. Using the City's Better Streets Plan, the design for the different types of alleys can be implemented. The City should study different neighborhood needs and determine a priority plan for creating living alleys in areas most in need of these improvements.

Living Streets

Living Streets are wider streets where sidewalks are expanded into excess right-of-way to accommodate formal open spaces or linear parks. Wide streets that have excess right-of-way provide an opportunity to develop living streets, especially where dense residential developments are being built. Many of these areas are deficient in open space, and the streets should be designed with places for relaxation, recreation, and neighborhood gatherings.

Enhancing Existing Parkways

Parkways are streets with broad, well-landscaped medians and sidewalks that provide recreational paths while moving bikes and vehicles. These streets function not only as transportation corridors, but also as linear parks, creating a green network. This green space can often be effectively used for pedestrian and open space functions, by providing multi-use trails, seating, and open spaces. They can also perform ecological functions, including stormwater runoff retention and infiltration and creating habitat. Two of the existing parkways, Park Presidio Boulevard and Sunset Boulevard, offer a major opportunity to enhance the north-south connections from Golden Gate Park. These streets already provide ample trails and open space, but are in need of overall care, improved crossings, and enhancement. By utilizing the existing open spaces offered by these parkways, the City is focusing on how to make the most of what we have. The City should develop a specific design program to address the enhancement of these two parkways.

Temporary and Permanent Street Closures

The City's Sunday Streets program – which was modeled on a 25-year program in Bogota, Colombia – has been a huge success. The proposal began in 2008 with the idea to close one street to cars on Sunday mornings so people can get out and be active in a car-free space. The program has since expanded to offer more opportunities for temporary public gathering spaces. Additionally, City agencies' collaborative effort to transform excess pavement into public spaces is on-going and several projects are being initiated around the city. This concept of temporary or even permanent street closures in the City presents a great opportunity to take advantage of existing street rights-of-way to create space for people to walk or ride their bike.

See *Map 3: Existing and Proposed Open Space* for more information on existing and proposed green street concepts.

POLICY 3.2

Establish and Implement a network of Green Connections that increases access to parks, open spaces, and the waterfront.

Despite San Francisco's many open space assets, park accessibility can be a challenge, particularly for those on bike or foot. For decades, streets have been built to maximize car volume and speed, resulting in roads with fast-moving traffic, inadequate pedestrian and bicycle facilities, and other barriers can that make it difficult and unpleasant for people to walk, bike and use other forms of active transportation.

In recent years, San Francisco has made great strides in retrofitting streets with pedestrian and bicycle improvements that make it easier to access parks, schools and other neighborhood destinations. Green Connections builds on this work, envisioning a 115-mile network of safe, functional, and attractive streets connecting people to parks, open spaces, and the waterfront. Green Connections is designed to meet three goals:

- Public Health: Increase park access
- Sustainability: Enhance urban ecology
- Livability: Support neighborhood stewardship and placemaking

Routes on the Green Connections network should significantly calm traffic, prioritize pedestrian and bicycle travel, enhance urban ecology and ecoliteracy, include beautification and artwork, and provide opportunities to gather and play. Routes will also be designed to be consistent with the Better Streets Plan, which creates a unified set of standards, guidelines, and implementation strategies to govern how the City designs, builds, and maintains its pedestrian environment to ensure streets contribute to a gracious public realm.

Green Connections will not create a new City program, rather, it calls for coordinating existing initiatives such as traffic calming and stormwater management, with the goal of creating a cohesive network of improved neighborhood walking and bicycling routes over the next twenty years. The scale of the network creates opportunities to coordinate with city projects and private development. Additionally, community members and neighborhood groups will play an important role in the Network's implementation and stewardship.

See *Map 10: Green Connections Network*.

MAP 10 - Green Connections Network

POLICY 3.3

Develop and enhance the City's recreational trail system, linking to the regional hiking and biking trail system and considering restoring historic water courses to improve stormwater management.

San Francisco currently has an extensive network of trails that provide local opportunities for walking and biking and link to regional trails and open spaces throughout the Bay Area. These trails surround the Bay, parallel the ocean, extend through parks and neighborhoods and connect existing open spaces. Many of these trails have gaps and lack adequate signage. The City should prioritize filling these gaps and increasing awareness of the trails through updated signage. New trails are also envisioned to provide additional hiking and biking opportunities and important wildlife corridors. The City should also work with Daly City and San Mateo County to encourage better links to San Bruno Mountain and trails to the south.

New trails throughout the city could consider historic water courses to incorporate stormwater management, provide trail connections, or restore aquatic and riparian habitats or wildlife corridors. These trails should provide better ways to move people through increased hiking and biking opportunities. Some adopted Area Plans, such as the Glen Park Area Plan, have identified such opportunities.

MAP 11 - San Francisco Bay Trail

Continuous Waterfront Trail

The trails along the waterfront are administered by many different jurisdictions including regional, city, and federal agencies. However, visitors do not necessarily distinguish between these jurisdictions, and want a continuous, usable trail system along the waterfront. The City should improve trail signage to ensure users are provided clear routes and destinations and work to fill any gaps in the proposed trails and in the connections between them where it does not impede on water dependent commerce.

Bay Trail

The Bay Trail is a regional trail developed by the Association of Bay Area Governments (ABAG) that is proposed to surround the entire San Francisco Bay. In San Francisco, this trail would extend from the Golden Gate Bridge along the bay to the Central Waterfront neighborhood, where the trail is being built inland along Illinois Street through Pier 70 (which, along with the Power Plant site, will eventually provide opportunities for waterfront access). The Bay Trail will eventually continue around the Bay through Hunters Point Shipyard and down to San Mateo. (See *Map 11: San Francisco Bay Trail*.) The gaps are shown in *Map 11* and the City should prioritize closing these gaps to ensure a complete Bay Trail. Closing the Bay Trail gaps would also help in the development of the Blue Greenway, a continuous corridor that links the existing and proposed open spaces through the Bay Trail and the San Francisco Water Trail. The City's Blue Greenway project intends to complete San Francisco's southeast section of the Bay Trail and that portion of the Bay Area Water Trail, described below.

Coastal Trail

The California Coastal Trail is a network of trails for walkers, bikers, equestrians, wheelchair riders, and others along the entire 1,200 miles of the California coast. Through San Francisco the 10.5 mile trail connects many scenic and tourist attractions along the coastline, including the Golden Gate Bridge, the Presidio, Ocean Beach and Fort Funston. While the current trail is relatively complete, prioritizing improvements such as signage and fixing small gaps would ensure that the trail is accessible and visible for its entire route.

Bay Area Water Trail

The State Coastal Conservancy is leading the implementation of the San Francisco Bay Area Water Trail Plan (Water Trail Plan), a new regional access project. The Water Trail is a network of access sites (or "trailheads") that will enable people using non-motorized, small boats or other beachable sailcraft—such as kayaks, canoes, dragon boats, stand-up paddle and windsurf boards—to safely enjoy single and multiple-day trips around San Francisco Bay. This regional trail enhances Bay Area communities' connections to the Bay for water recreation activities, and creates new linkages to existing shoreline open space and other regional trails, such as the Bay Trail. The Water Trail will include educational, stewardship, and outreach components.

The Bay Area Ridge Trail

The Bay Area Ridge Trail is a multi-use trail that links the hills and ridges of the nine counties of the Bay Area. It will be approximately 550 miles in length when completed. Most of the 13.5-mile portion of the trail in San Francisco was completed in 1992 and is in the process of being reevaluated by the Bay Area Ridge Trail Council, with the goal of improving its route, signage and connections to other city and regional trails. The City should work with the Council and the community in this rerouting effort, especially one that takes users through parks and makes connections to other trails, such as the Bay Trail, the Coastal Trail, and the proposed new cross-town corridor described below. The City should also assist the Ridge Trail Council in its efforts to improve signage along the route. *See Map 12: Regional Trails*.

MAP 12 - Regional Trails

New Cross-Town Corridor

A proposed corridor would connect wildlife habitats and allow hikers an urban wildlife trail experience through some of the City's most diverse natural areas. The corridor would begin in the Presidio, travel through Golden Gate Park, stop at Twin Peaks and Mt. Sutro, wind through Glen Park Canyon, then McLaren Park, and finally reach the San Francisco Bay in Candlestick Point Recreation Area. While the exact route of this proposed new corridor has yet to be determined, it could include an extension to connect with Lake Merced and opportunities to daylight historic creeks in an enhanced green corridor. The City should work with pertinent Federal, State, and local agencies along with the community to develop this new corridor.

POLICY 3.4

Encourage non-auto modes of transportation – transit, bicycle and pedestrian access—to and from open spaces while reducing automobile traffic and parking in public open spaces.

San Francisco's transit first policy, adopted by the Board of Supervisors as Section 8A.115 in the San Francisco Charter, emphasizes the importance of providing and prioritizing transportation via transit, walking, and bicycling for all trips in the city including to parks and open spaces. Non-auto transportation is especially important because many of the City's large parks are located far from dense population centers and high needs areas. While the City's extensive network of transit allows users to access all of the City's parks, crossing the City, especially on a weekend, can often entail multiple transfers and long waits because of less frequent service. The City should consider increased and/or express local bus service to major open space amenities particularly from high needs areas. The City should also explore the idea of a "Green Transit Program," a bus that delivers riders from the City's high needs areas to large parks. This service should be affordable and allow families an easy way to access the City's large open spaces. Additionally, the City should improve transit access to regional open spaces outside of San Francisco such as Marine Headlands, Mount Tam, Pacifica beaches, and the San Bruno Mountains.

Bicycle routes that serve to get riders to and around our open spaces also provide a key component of the city's non-auto transportation network. Many of the improvements in the City's Bicycle Plan address the need to connect people to open spaces. The City should prioritize bicycle improvements that provide both a connection to the City's open spaces and serve as the most heavily utilized routes. For example, the improvements suggested along the panhandle would improve access to the Panhandle and Golden Gate Park as well as facilitate this route as a commuter corridor for bicyclists. The City should also work to provide bicycle parking at entrances to park facilities and throughout large open spaces to promote increased bicycle usage. In August 2013, the Bay Area BikeShare was launched with 34 San Francisco locations. The City should consider expanding those locations to serve major parks and open spaces, like Golden Gate Park, that are on the City's bike network.

Heavy or fast traffic in and around public open spaces endangers pedestrians, limits access to open space, endangers plant and animal life and makes the open space less enjoyable to be in. Excessive parking spoils the user experience and untimed parking encourages non-park users to park, restricting availability of spaces for park visitors and residents alike. The following methods of reducing traffic in and around public open space are consistent with the urban design and transportation elements of the General Plan and should be applied where possible:

- Consider eliminating some roadway cut-throughs and ensure new roads are necessary for park access, not only as through-ways.
- Increase traffic calming on roads. Reduce the capacity of roads in public open spaces to encourage slower travel and provide safer routes for pedestrian and bicycle travel.
- Establish strict speed limits. Monitor speeds throughout the parks and ensure that strict speed limits are enforced.
- Study and implement, where appropriate, timed parking that supports typical-length visits to a park, but discourages all-day parking during the week.

POLICY 3.5

Ensure that, where feasible, recreational facilities and open spaces are physically accessible, especially for those with limited mobility.

The City should ensure that recreational facilities and public open spaces are accessible to all San Franciscans, including persons with special recreational needs, where feasible. For example, the hilly topography of the City makes providing some paths ADA accessible difficult to achieve. People with special needs may include seniors, children (particularly the very young), and people with disabilities. In order to achieve this policy, park and recreation facilities should be planned and programmed for people with special recreational needs in mind. The following criteria should be followed when developing or renovating any new space:

- All parks and open spaces should comply with applicable requirements of the Americans with Disabilities Act and the California Building Code.
- The City should utilize the US Access Board's recreation facilities and outdoor area accessibility guidelines as a best practice for design and construction.
- The City should also ensure that routes to and from the open spaces are accessible. For example, the route from the public transit stop to the park should be fully accessible.

POLICY 3.6

Maintain, restore, expand and fund the urban forest.

Trees and understory plantings in city parks, developed public open spaces, city streets and private property collectively form the urban forest. The urban forest contributes substantially to our quality of life and to the ecological functioning of our city. Trees and landscaping soften the urban environment, provide habitat, improve air quality, absorb carbon and mitigate stormwater runoff. Given these benefits, trees are an essential piece of the City's infrastructure. The urban forest requires consistent maintenance, funding and long-term planning to ensure its health and growth over time.

The SFRPD plants and maintains a variety of landscaping, including approximately 131,000 trees in city parks and other SFRPD open spaces. The Department of Public Works, Bureau of Urban Forestry (BUF) has permit jurisdiction over 105,000 trees and landscaping in the public right-of-way and provides maintenance along designated streets. Finally, property owners maintain trees within their property line as well as street trees and landscaping along their street frontage on streets not maintained by BUF.

The Planning Department, in collaboration with the Department of Public Works, has created a plan to promote San Francisco's urban forest with a focus on street trees. The Urban Forest Plan – Phase 1: Street Trees (2014), adopted here by reference, identifies policies and strategies to proactively manage, grow and protect the City's street tree population. A corresponding planning effort is needed, focused on policies and recommendations pertaining to trees in parks and open spaces. The Urban Forest Plan - Phase 2: Trees in Parks & Open Spaces should be funded and carried out. Many of the city's trees and understory plantings in our parks have reached maturity and are in a state of degradation. A thorough tree replanting strategy in parks and open spaces that addresses not only hazardous trees, but also develops a comprehensive replanting strategy that includes a system-wide prioritization framework, should be pursued. In addition, a third phase of urban forestry planning (Urban Forest Plan - Phase 3: Buildings and Private Property)should be completed to present recommendations for trees and landscaping on private property as well as on building (i.e. living architecture, green roofs and walls). The completion of all three planning phases will produce a holistic vision for the City's urban forest.

Urban forestry planning in San Francisco requires a Citywide Street Tree Inventory and Parks Tree Assessment to gather the data needed to achieve a higher level of tree management and care. The Citywide Tree Inventory should include geographic location, tree species, size, age, and disease classes, and other related information for trees within the public right-of-way. A Parks Tree Assessment should evaluate the condition and needs of trees under SFRPD's maintenance purview. Upon completion of these studies, property owners should be encouraged to plant trees and landscaping fronting their property consistent with the City's Urban Forest Plan and DPW's tree and landscaping planting guidelines. Additionally, the City should seek long-term funding sources to maintain and expand the urban forest on streets and parks. Codes relating to planting and maintaining street trees and landscaping in public spaces, parks, along public right-of-ways and within private property should be rigorously enforced to in order to maximize the extent, health, and longevity of the City's urban forest.

OBJECTIVE 4

PROTECT AND ENHANCE THE BIODIVERSITY, HABITAT VALUE, AND ECOLOGICAL INTEGRITY OF OPEN SPACES AND ENCOURAGE SUSTAINABLE PRACTICES IN THE DESIGN AND MANAGEMENT OF OUR OPEN SPACE SYSTEM

San Francisco is a heavily urbanized city, which nonetheless has a rich variety of plant and animal communities. Among these are coastal scrub, grassland, oak woodlands, marsh, and stream-side habitats and their associated wildlife. Some of these habitats hold species found nowhere outside of the Bay Area. The City also has significant landscaped areas, such as conifer plantings in Golden

Gate Park. By providing food and shelter for migratory and resident birds, butterflies, and insects they too play a major role in supporting San Francisco's biodiversity. Biodiversity includes the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur. Maintaining biodiversity requires genetic diversity, species diversity, and habitat diversity. San Francisco can be a leader in creating new and more sustainable open spaces by ensuring that all open spaces, including new and renovated park spaces, are developed in a way that enhances and works with local biodiversity.

POLICY 4.1
Preserve, protect and restore local biodiversity.

San Francisco's ecological communities include freshwater and tidal wetlands, riparian areas, grasslands, coastal prairies, oak woodlands, coastal scrub, dunes, rock outcroppings and our designed landscapes. Some of these areas serve as habitat for unique species including many rare and endangered species, such as the red-legged frog, snowy plover, and mission blue butterfly. Yet San Francisco continues to lose species diversity due to isolation and fragmentation of habitats and invasive species.

Parks and open spaces in San Francisco include both native and non-native species, both of which can contribute to local biodiversity. The City should employ appropriate management practices to maintain a healthy and resilient ecosystem which preserves and protects plant and wildlife habitat, especially rare species which are the primary contributors to local biodiversity.

Restoring some ecosystems would also help enhance local biodiversity. Wetlands and riparian areas, for example, provide habitat, biological benefits, and resource-efficient methods for treating storm water runoff in addition to serving recreational uses. However, many of San Francisco's wetlands have been buried by development and little of the original wetlands have survived in San Francisco. A number of restoration projects have recently been completed or are underway, including projects at Crissy Field, Heron's Head, Pier 94, Mountain Lake and Lake Merced. The City should continue to support the monitoring and restoration of these wetlands.

The long-term vision for the City should also include conserving and restoring hydrological resources, including riparian communities, seeps, springs, creeks, ponds, and lakes; and exploring the feasibility of day lighting creeks that are completely or partially buried, for example Islais Creek, Yosemite Creek and Mission Creek. In order to ensure the preservation and restoration of our local biodiversity, the City should increase awareness of the benefits of all ecological communities as well as how the public should and should not interact with these areas.

POLICY 4.2
Establish a coordinated management approach for designation and protection of natural areas and watershed lands.

San Francisco's natural areas are the undeveloped remnants of the historical landscape which contain rich and diverse plant and animal communities. Following the adoption of the 1986 Recreation and Open Space Element, the SFRPD exacted policies to develop a Natural Areas Program to manage the 530 acres of parks and portions of parks that constitute natural areas. The mission of the program is to restore and enhance remnant natural areas and to develop and support community-based stewardship of these areas. Policies governing access and appropriate use and enjoyment of protected natural areas should ensure that the natural resource values are not diminished or negatively affected by public use.

In addition to the SFRPD-owned land, there are a number of natural areas under the jurisdiction of other city, state and federal agencies and in private ownership. The long-term ownership and management of these lands is uncertain because these properties are not under rules and restrictions that would prevent them from being sold and/or developed. The City should ensure that a comprehensive inventory of all natural areas owned by city agencies other than the Recreation and Park Department and by private landholders is developed, in order to preserve the City's biodiversity and natural areas more holistically. This inventory should include promoting habitat corridors among open spaces and natural areas. The following criteria should be used to determine what constitutes a significant natural resource area worthy of protection:

- The site is undeveloped and relatively undisturbed, and is a remnant of the original natural landscape and either supports a significant, diverse, or unusual indigenous plant or wildlife habitat, or contains rare geological formations, or riparian zones.
- The site contains rare, threatened, or endangered species, as identified by the U.S. Fish and Wildlife Service or California Department of Fish and Wildlife, or contains habitat that has recently supported and is likely again to support rare, threatened, or endangered species.
- The site is adjacent to another protected natural resource area and, if protected from development, the two areas together would support a larger or more diverse natural habitat.

Given constraints on the City's financial resources, public acquisition for all natural areas that are in private ownership may not be an option. However, if such an area is at risk of loss through development, the site should be examined as a candidate for open space acquisition. Relative importance of the site as a natural area should also be assessed. If the area is not to be publicly acquired, the Planning Commission may require any development that is approved on the site to preserve the most important portions of the area, if found feasible and consistent with the Planning Code.

Once the significant natural resources outside the jurisdiction of RPD are identified, the City should develop a management plan for these natural areas. Many of the properties are currently managed by the City, State or Federal agencies whose mission is not consistent with the preservation of natural areas. In these cases, consideration should be given to joint management through a conservation district or a governmental entity that controls the management of these areas.

POLICY 4.3
Integrate the protection and restoration of local biodiversity into open space construction, renovation, management and maintenance.

The City should work to protect and enhance biodiversity throughout the parks and open space system. When parks and open spaces are renovated and new spaces are planned or acquired the City should work to ensure that these spaces are environmentally sustainable, from construction to management. New buildings and park features should protect and help restore local biodiversity. Appropriate criteria should be applied to different open spaces depending on the sensitivity of the habitat, the proposed uses, and the amount of space the new or renovated project will provide. However, certain key requirements, which the City is currently working on, will be applied to all new and renovated open spaces:

- **Soil conservation.** In order to conserve and to use local soil, a cut fill balance will be maintained where feasible to minimize the need to transport soil to or from the project site.
- **Native and drought-tolerant plants.** The City is working to replace invasive and water-intensive species and species of minimal habitat value with species that fit better with San Francisco's natural environment. Just as the City restores degraded areas with local native plants for wildlife habitat and biodiversity in natural areas, habitat and biodiversity should be considered along with traditional landscaping objectives of aesthetics and cultural value throughout our park system and in the streetscape. Drought-tolerant non-native plants can also contribute to the thriving of local biodiversity and meet many of these overall goals. To provide native and drought-tolerant plants, the City should continue to work with private entities and City agencies to encourage native and drought-tolerant plant nurseries.
- **Lighting.** Park lighting should be environmentally efficient and provide safety and security to park users, while being as limited as possible in order to protect wildlife in natural areas from the impacts of light pollution.
- **Habitat and Wildlife.** Where appropriate, utilize materials and design spaces, facilities and buildings in a manner that provides habitat for local and migrating wildlife.
- **Construction and Siting.** Utilize green building practices, local materials, services and supplies; site new structures in locations that minimize disruption of the natural environment; and mitigate impacts during constructions phases.
- **Waste Management.** The City should continue to enforce the no feeding of wildlife provision of the Park Code and manage recreational facilities to minimize wildlife access to human garbage.
- **Stormwater Management.** The City should continue to creatively solve for the management of stormwater runoff in our dense urban landscape. Managing the city's stormwater runoff in an environmentally-sensitive manner, such as using bioswales or through creek restoration could provide an increasingly biodiverse habitat.

POLICY 4.4
Include environmentally sustainable practices in construction, renovation, management and maintenance of open space and recreation facilities.

The City has been working to develop more sustainable practices in the development or renovation of their park and recreational facilities. Below are a number of programs that highlight efforts throughout the City.

- **Water conservation, recycling/reuse, and stormwater mitigation.** The SFPUC has developed a recycled water program with the North San Mateo County Sanitation District to use recycled water for three golf courses: Lake Merced Golf Club, Olympic Club, and San Francisco Golf Club. The SFPUC is also working on a treatment facility for recycled water on the city's west side. One of the primary uses of this recycled water would be to irrigate parks and open spaces in City property such as Golden Gate Park. The Recreation and Parks Department is the biggest user of water in the city, with an annual total usage of 691 million gallons of water. It is therefore critical to conserve potable water and promote alternative water resources such as recycled water and stormwater capture, especially for uses such as irrigation. Expanding the use of recycled water and considering other innovative treatments to capture and reuse stormwater runoff are being pursued by the SFPUC, the Recreation and Park Department, and the Office Community Investment and Infrastructure. Impervious surfaces are being limited or retrofitted to utilize pervious surfaces and innovative methods for capturing and reusing storm water, such as cisterns. Support for these efforts should continue, as they offer an easy and effective solution to water conservation and to potential water shortages caused by drought, earthquakes, or decline in the snow pack.

- **Energy production and efficiency.** The City's open spaces could serve as a source of energy for the City. For example, new or renovated buildings could utilize solar panels or other alternative energy sources. The SFRPD has also been a leader in the City in trying to reduce their energy usage. The goal is to realign the records so that meters are tied to park names and building names in order to have greater control of energy reduction measures. Currently, meter numbers are tied to physical addresses only with multiple meters and multiple addresses in one property.

- **Composting and Mulching.** The City has had a composting program since 1996. SFRPD is one of the leading partners and one of the biggest producers of green waste in the City. The recycling of this waste is used not only in city parks and in community gardens throughout the City, but is provided to farms and households for use in their private gardens.

- **Integrated Pest Management.** The City of San Francisco follows the award-winning Integrated Pest Management ordinance. The law requires that when the City is managing unwanted insects, rodents, birds, weeds, or other organisms for buildings & landscapes that the City follow a series of requirements including: how integrated pest management (IPM) is implemented, limitations on pesticide products, exemptions to the Reduced Risk Pesticide List (that may be used as a last resort), posting and notification for pesticide treatments, recordkeeping and data requirements, and accountability. The program must be followed by all city agencies and any city agency that leases land from the city.

- **Historic Preservation.** Appropriate repair and retrofitting of existing historic resources is an inherently sustainable strategy and ensures that the character and integrity of significant historic resources is maintained. Adaptive reuse, such as for new programming, accessibility, life and safety, and systems upgrades, is a strategy that can be used to conserve materials, minimize impacts to the environment, promote a sense of place, and improve livability.

OBJECTIVE 5

ENGAGE COMMUNITIES IN THE STEWARDSHIP OF THEIR RECREATION PROGRAMS AND OPEN SPACES

Residents can be a major asset in addressing open space needs, providing oversight, maintenance and stewardship. They can be instrumental in ensuring that recreation and open space activities are rooted in local needs and can offer a community-based solution to public sector gaps, particularly in times of budget constraints.

POLICY 5.1
Engage communities in the design, programming and improvement of their local open spaces, and in the development of recreational programs.

The most successful public spaces are those that respond to the needs of their users. Statistics, maps and figures can only go so far in determining a community's need – they can explain proximity to open space, they can describe type of open spaces that are missing (hiking trails, sports fields, playgrounds, access to and from open water, etc.), but they cannot identify the components of open space design which will most reflect their user community.

Open space designs and improvement plans, recreational programs, partnerships for new concessions, and other park additions should always include community participation. The level and intensity of community outreach and engagement may differ based on project type, ranging from written notifications, to community meetings and workshops, to design charrettes. Outreach and engagement efforts should start at the initial project stage, which provides the opportunity to learn about the local community's recreation and open space needs, and continue throughout the project. The City should strive to actively engage community members throughout the process by using a variety of community engagement tools.

A diversity of recreation programs is typically needed to serve the recreation needs and interests of San Franciscans. The City should consider many tools and criteria when developing recreation programs. Some useful tools include but are not limited to:

1. the City Survey from the Controller's Office, which provides an overview of park usage, park quality, and park programming from residents;
2. intercept surveys, which provides observational park usage;
3. user surveys from recreation programming participants;
4. facility-based input to provide neighborhood feedback on recreation programming; and,
5. emerging technologies that survey existing and potential park users including residents, workers, and visitors.

Connecting with and engaging the community will expand opportunities to honor community heritage, facilitate participation in broader arts and cultural activities, and ensure that facilities and programs are appropriate for park users and reflect community character.

Community representation can be continued as the park evolves by including plans that promote volunteer projects derived from the interest and abilities of the community, under the direction of park staff.

POLICY 5.2
Increase awareness of the City's open space system.

San Francisco's open spaces offer residents, visitors and workers many opportunities for recreating and relaxing. The enormous variety of spaces offers a range of options for the user, from a small plaza where downtown workers sit to enjoy their lunch, to large parks where hikers can walk through a redwood grove, to the numerous classes and programs offered by the Recreation and Park Department for families.

The City should coordinate efforts to increase awareness of all City-owned open spaces and promote an increased use and activation of underutilized spaces, which are often underused simply because people are unaware of all the amenities offered. The Recreation and Park Department should continue to enhance its presence on the internet, social media, and emerging technology. All City agencies owning public open spaces should also use emerging technologies to increase awareness of public open spaces. Ideally, the City should create a holistic platform that includes information (hours of operation, permitted activities, community stewardship opportunities, etc.) on all publicly-owned parks and open spaces regardless of the owning agency.

Open spaces also provide an opportunity to increase public understanding of and appreciation for San Francisco's unique natural heritage. Larger open spaces, such as natural areas and parks, as well as smaller landscaped areas, such as POPOS and street parks, may present opportunities to build awareness and understanding of ecology and the natural world through design elements such as demonstration gardens, educational signage, and interpretive artwork. The City should continue to explore creative partnerships with community groups, educational institutions, and cultural organizations to expand environmental education programs and provide opportunities for community-based stewardship and conservation. Such programs should target youth and high-needs areas in particular.

POLICY 5.3
Facilitate the development of community-initiated or supported open spaces.

Publicly-owned and managed open spaces, such as those managed by the SFRPD, are only one component of the City's open space network. Informal, community-organized open spaces, such as community gardens, green opportunities on street corners or along undeveloped street right-of-ways, and opportunities on private or underutilized (vacant) property, provide great opportunities for recreation and open space.

Community organizing around engaged urban revitalization, such as the creation of parks and open space, can have tangible social benefits too. It fosters a sense of responsibility, and encourages residents to take initiative in affecting their own environment. Creation of a community space can support the coming together of a neighborhood, facilitating social interactions and further increasing participation in future planning efforts.

The City should look for opportunities to expand the development of street parks, urban plazas, community gardens, improved streets, and shared school playfields (as described in Objective 3). An evaluation of public property potential, vacant and underutilized properties, and even private property where agreements with owners could be facilitated, would aid in identifying open space opportunities. While gaining access to private property is often a challenge, as owners may want to preserve development potential in the future, it may be possible to structure conditions that allow for temporary use as open space. A formal authorization agreement between the property owner, City, and community could regulate limited-term public use, allowing vacant private properties to serve as a positive community asset without detriment to existing or future building rights.

The City should support community-initiated efforts both administratively and financially by promoting and expanding programs like the Community Challenge Grants and Community Opportunity Fund. The City should also broaden communities' awareness of ways to develop or improve their own neighborhood spaces, the need for open space, and opportunities for them to respond to such needs. Education programs, which can be held in schools, within nonprofit programs, or even as seminars at neighborhood organizations, allow residents to tap into strategies for designating, financing and developing urban open space.

Various nonprofit organizations already provide technical assistance and support, broadening knowledge about what communities can do; organizing seminars, which aid community groups in understanding how to get a project started; providing planting lists and advice on their websites; and holding volunteer days to help implement work. Communities may also have physical needs for maintenance support and tools. Tool lending libraries that assist park volunteers in cleanups, landscape improvements, and community tree plantings, all help support the development of open space and should be supported.

POLICY 5.4
Reduce governmental barriers to community-initiated recreation and open space efforts.

The high cost of permitting requirements, combined with the time to complete them, can be a significant disincentive to community efforts. Recognizing this, San Francisco's street regulating agencies have streamlined permitting processes for street landscaping and reduced fee requirements. However, significant hurdles still exist to creating major changes to properties or to the public right-of-way. Because of the potential for conflicts with parking, traffic, transit, and adjacent uses, it is difficult to streamline major improvement processes. Yet, Portland has established a model ordinance, the "Intersection Repair" ordinance, which was intended to facilitate neighborhood improvements to streets, including major interventions like developing public gathering places in a street intersection. The City should study how to improve the delivery of public street improvements, and examine the lessons from places like Portland to examine what aspects can be facilitated.

Liability is another barrier. In San Francisco, improvements that convert private property to publicly accessible, or even private improvements to public property, typically require that the party contributing the improvements indemnify the City of all liability, which can bring the additional financial burden of insurance. The City needs to make a concerted effort to limit such liability concerns, and balance good public policy with legal caution. In particular, the City should pursue legislation to address the issue of public liability in situations of joint use or joint development of public properties, so that the liability may be equitably shared by multiple agencies (such as the agreement between the SFUSD and the Recreation and Park Department to allow public access to some schoolyards).

POLICY 5.5
Encourage and foster stewardship of open spaces through well-run, active volunteer programs.

Individual participation in stewardship of public open spaces brings obvious improvements to our parks – greener plantings, better maintenance, and an overall feeling of ownership which can deter destructive behavior. Stewardship activities also provide benefits for the individuals by encouraging appreciation of the space, stimulating more outdoor activity, and promoting long-term civic engagement.

The SFRPD has a wide-ranging volunteer program which creates opportunities to participate in gardening and ecological restoration projects, recreational programming, park planning, and fundraising. The program also fosters group sponsorship through weekly, ongoing work parties that provide ongoing stewardship of a park or area.

The Department of Public Works runs a number of parallel programs, such as Adopt A Street, Streets Park Program, and the Community Clean Team, to facilitate neighborhood stewardship efforts on San Francisco's streets, parks and schools.

The Port has also developed successful partnerships with organizations (like Literacy for Environmental Justice to assist with maintenance and education at Heron's Head Park), and Kayaks Unlimited (for stewardship of Islais Landing).

But more resources are necessary to realize the full potential of volunteer programs, expanding the breadth and depth of volunteer opportunities as well as overall participation rates. The City should work to expand these partnerships for stewardship of parks and open spaces, and could help coordinate all volunteer opportunities – whether City or nonprofit sponsored – into an online, easy-to-access calendar, or create a volunteer database with up-to-date schedules and opportunities. The City should also explore ways to share ongoing maintenance of parks and open spaces with individual stewardship organizations or through inter-departmental coordination.

OBJECTIVE 6

SECURE LONG-TERM RESOURCES AND MANAGEMENT FOR OPEN SPACE ACQUISITION, AND RENOVATION, OPERATIONS, AND MAINTENANCE OF RECREATIONAL FACILITIES AND OPEN SPACE

Securing resources for the maintenance and renovation of existing open spaces and providing funding for the acquisition of new open spaces has been a challenge for the City. The City must recognize the costs associated with open space maintenance, renovation, and acquisition and ensure that their funding mechanisms address these major expenditures.

POLICY 6.1
Pursue and develop innovative long-term funding mechanisms for maintenance, operation, renovation and acquisition of open space and recreation.

One of the key goals of this Plan is to ensure that the policies and programs have adequate resources and that a consistent source of funding for operations and maintenance is secured. The City has the responsibility to provide necessary funding for well-maintained recreational facilities and open space. To overcome the challenge of the City's diminishing resources and increasing costs and in order to meet existing funding challenges, the City should pursue different innovative financing mechanisms.. These strategies should help the City realize the monetary benefits provided by parks and open space and invest those benefits into the park system. The City should continue to pursue sustainable mechanisms to overcome the funding challenges. Below is a list of different mechanisms commonly used in cities as public finance strategies for parks and open spaces. Many of these funding strategies have been already used in San Francisco. The City should evaluate these mechanisms and their effectiveness on an on-going basis.

- **General Obligation bonds:** RPD has been using general obligation bonds as a long-term capital planning strategy. These bonds focus on the basic, critical needs of the park system, reducing earthquake safety risks and renovating rundown parks, pools, recreation centers, and playgrounds. In order to ensure that each bond efficiently addresses the needs of communities, RPD should continue to assess the results of each bond and their cost-efficiency in order to enhance the structure, process, and efficiency of future bonds.

- **Public-private partnerships:** The City has used public private partnerships since the park system was founded. Support from private entities and individuals can enable the park system to provide services and recreation opportunities to San Franciscans. The City is continuing to develop public-private partnerships to increase open space amenities and funding opportunities. Such facilities can range from mobile food vendors to larger concessions operating in park facilities. Such opportunities can provide a

reliable source of funding for park improvements and maintenance, while ensuring that they benefit park users, address their needs and concerns, and protect the public interest. Responsible agencies should develop these opportunities through an appropriate outreach and engagement process as outlined in Objective 5. Additionally, these agreements should:

  - Maintain and enhance public access to recreation and park services; and
  - Maintain transparency and accountability to the public; and
  - Support the park or open space through financial and/or physical improvements

- **Grants:** Granting agencies such as federal and state agencies and foundations provide innumerable financial help and support to the city. The city agencies should continue to proactively pursue grant opportunities.
- **Local Fundraising:** The City's vast network for park groups and active community organizations provide a wealth of knowledge and resources that can help support the city's open spaces. The City Budget should prioritize adequate resources and consistent funding source for operating and maintaining open space.
- **Citywide Impact Fees to Fund Recreation Facilities and Open Space.** Development impact fees are fees the City charges developers in connection with approval of a development project for the purpose of defraying all or a portion of new public facility needs related to the development. These fees can be used to acquire and develop new recreational facilities and open spaces and for capital improvements to existing open spaces. Development impact fees that provide revenue for recreation and open space are in effect in a number of City neighborhoods, but not citywide. The City has developed an initial nexus study to demonstrate the impact of new development on open space.
- **Park Improvement Districts.** An innovative approach, similar to the Community Benefits District (CBD) used in many of San Francisco's neighborhood commercial districts, is a Park Improvement District. A Park Improvement District is a public-private partnership in which businesses and/or residents in a defined area elect to pay an additional tax in order to fund improvements and maintenance for the park. The parks are maintained by the City, but this additional funding provides supplemental funds to cover needed improvements and maintenance overseen by a neighborhood-elected board of directors. This concept could be piloted to determine its effectiveness.
- **Voluntary Contributions.** Many cities provide the option to voluntarily contribute a small amount of money specifically earmarked for open space. Such a contribution option would be added to residents' utility bills to fund improvements to open space.
- **Tax Revenue Options.** In some cities, decision makers have pursued the option of an additional tax contribution earmarked for open space, usually via an additional property tax on residential and/or commercial owners. The creation of a new tax requires a two-thirds majority vote by the electorate and provides a consistent source of funding. The money can be used for acquisition, maintenance, or capital improvements.
- **Community Facilities Districts.** In Mission Bay and Hunters Point Shipyard, Community Facilities Districts (or CFD), or special tax districts, will be used to help fund the on-going maintenance of the new open space facilities. The South Beach area also has a CFD that helps fund the maintenance of some small public plazas.

RPD and other public agencies responsible for recreation and open space in the City should continue analyzing how such funding options could be applied in San Francisco for recreation and open space maintenance, operations, renovation and acquisitions.

2014 Recreation & Open Space Element adopted by the Board of Supervisors Ordinance 0153-14 on 07/15/2014.

Amendments by Board of Supervisors Ordinance 0023-15 adopted on 02/10/2015.

Amendments by Board of Supervisors Ordinance 0020-17 adopted on 01/31/2017.

Amendments by Board of Supervisors Ordinance 0019-17 adopted on 01/31/2017.

Amendments by Board of Supervisors Ordinance 0274-18 adopted on 11/13/2018.

Amendments by Board of Supervisors Ordinance 0064-20 adopted on 04/21/2020.

Amendments by Board of Supervisors Ordinance 0143-20 adopted on 08/18/2020.

Amendments by Board of Supervisors Ordinance 0155-23 adopted on 07/25/2023.

EXHIBIT 24

Safety & Resilience Element

NOTE: This **2022 Safety and Resilience Element** was adopted by the San Francisco Board of Supervisors on December 13, 2022. This Element update replaces the previous 2012 Community Safety Element.

INTRODUCTION

Purpose

The purpose of the Safety & Resilience Element is to facilitate safety from hazards, achieve racial and social equity, and strengthen community resilience. It provides a comprehensive set of policies for minimizing San Francisco's contribution to climate change (or "the climate crisis") and ensuring local resilience to multiple hazards. The policies here seek to protect the people and assets in San Francisco from loss of life, injury, property loss, environmental damage, and social and economic disruption from natural or technological disasters. The City has a profound obligation to protect communities and areas that face higher vulnerability to disasters.

The Safety & Resilience Element focuses on all hazards: natural and human-made. There is a strong foundation addressing seismic hazards, as earthquakes are the greatest risk to life and property in San Francisco due to the San Andreas and Hayward Faults. There are numerous other hazards prone to occur in San Francisco, such as flooding and poor air quality. Additionally, there are human-made hazards that pose threats to the City's health and welfare and must be considered alongside natural hazards for mitigation, preparedness, response, and recovery, such as pandemic and release of hazardous materials. Due to the climate crisis, hazards are occurring more frequently, intensely, and simultaneously. The Safety & Resilience Element aims to address the complexity and severity of all hazards.

The Safety & Resilience Element names Environmental Justice Communities as areas in San Francisco disproportionately experiencing environmental burdens. Environmental Justice Communities, and others, tend to experience hazards more frequently and more intensely as compared to the City as a whole, and they take longer to recover. The Environmental Justice Communities Map identifies communities based on exposure to environmental pollution and other social vulnerabilities, which are often low-income communities and communities of color. Similarly, the Safety & Resilience Element names the American Indian community, the Black community, and other communities of color who are disproportionately experiencing racial and social inequities. The policies also name vulnerable communities with heightened risk and increased sensitivity to potential harms than the City average. The Safety & Resilience Element seeks to eliminate disparities and burdens related to all hazards and the climate crisis for all San Franciscans, starting with Environmental Justice Communities and other vulnerable people. When named, the Safety & Resilience Element is indicating the geographic areas (Environmental Justice Communities) and/or dispersed communities (American Indian community, the Black community, and other communities of color, and other vulnerable communities) in the City where policies should begin and target their work. In doing so, the Safety & Resilience Element offers policies to achieve racial and social equity, through actions and other systemic changes that amend past injustices and enable proactive, community-led solutions for the future.

In brief, the Safety & Resilience Element is organized into six goals to achieve racial and social equity, environmental justice, and climate resilience.

1. **All People Live in Safe & Healthy Communities:** To ensure equitable safety, San Francisco must remedy past injustices and eliminate environmental burdens for all San Franciscans, starting with those experienced by Environmental Justice Communities.
2. **Multi-Benefit Climate and Hazard Resilience:** Pursue multi-hazard risk reduction strategies and maximize community benefits along the way to becoming a net-zero emissions City by 2040.
3. **Hazard Mitigation:** The City must reduce the likelihood, scale, and severity of impacts from all disasters to the economy; the built and natural environment; and all communities, starting with reducing such impacts in Environmental Justice Communities.
4. **Emergency Preparedness:** Ensure San Francisco residents, workers, and visitors have the knowledge, capacity, and government support needed to be safe in the face of disasters.
5. **Response:** Provide San Francisco residents, workers, and visitors with the essential support and services needed immediately following a disaster for life safety and functional recovery.
6. **Recovery and Reconstruction:** Rebuild San Francisco's built, natural, and social assets and communities towards a more equitable and resilient future.

Implementation

The Safety & Resilience Element establishes policies to guide the City's actions in preparation for, response to, and recovery from a major disaster. As a policy document, the Safety & Resilience Element guides city decision making and actions, such as funding programs and regulating development. Implementation of the Safety & Resilience Element is carried out through numerous City plans and programs, as well as actions by the private sector and development.

Notably, there are multi-agency efforts to coordinate climate mitigation and adaptation and ensure San Francisco becomes more resilient to the threats of the climate crisis. Mayor London N. Breed officially launched ClimateSF in 2021, led by the Mayor's Office and the Office of Resilience and Capital Planning, Planning Department, Department of the Environment, Port of San Francisco, and the San Francisco Public Utilities Commission. ClimateSF establishes goals for collective action on climate resilience planning, policy, and guidance across the City. This coordination supports a central focus on racial and social equity, healthy communities, just transition, connection to nature, and innovation. Through ClimateSF, major components of the Safety & Resilience Element are implemented.

RELATIONSHIP TO CITY-LED ACTION PLANS AND PROGRAMS

The Safety & Resilience Element contains broader policies to reduce impacts that will need to be carried out by the City. The City maintains three principal implementation plans that provide more immediate directions, specific strategies, and measurable objectives for monitoring and evaluation: the Hazards and Climate Resilience Plan, Climate Action Plan, and Emergency Response Plan. These plans work in partnership with the Safety & Resilience Element and are incorporated by reference here. A fourth plan, a Recovery Plan, is planned to be produced by the City to facilitate healthy and equitable recovery after disaster.

- The *Hazards and Climate Resilience Plan* (HCR), led by the Office of Resilience and Capital Planning and adopted by the Board of Supervisors, is a climate adaptation plan that responds to all hazards. The HCR serves as the City's local hazard mitigation plan for disasters, adopted by the Federal Emergency Management Agency (FEMA). It is the City's blueprint to understand and prepare for the impacts of natural hazards and climate change on our people and our assets.

- The *Climate Action Plan* (CAP), released by the Mayor and Department of the Environment, was originally developed to reduce the City's greenhouse gas emissions. Achieving net-zero greenhouse gas (GHG) emissions by 2040 is still a plan driver; the plan now acknowledges the interwoven social and racial inequities of the climate crisis. Accordingly, the CAP advances measurable strategies to achieve net-zero emissions while addressing racial and social equity, public health, a just economy, and community resilience.

- The *Emergency Response Plan* (ERP), led by the Department of Emergency Management, provides an immediate action plan to coordinate response to disaster. It includes an overview of the emergency management system, detailed and restricted information for the Emergency Command Center, and a set of functional and hazard-specific details. The COVID-19 Phases I and II After Action Report outlined the strengths of the City's plans and suggested further updates to enhance the City's Emergency Response Plan. The suggested improvements include increasing community equity, improving the City's Disaster Service Worker program, and providing further clarity and streamlining to both the organization of response services and procurement of emergency supplies.

- A *Recovery Plan* is planned to be produced by the Office of Resilience and Capital Planning. The City needs an advance planning document to guide long-term recovery and reconstruction post-disaster for all hazards that the City faces. A recovery plan can support rebuilding the City in a way that is more equitable and resilient to future disaster, based on the latest citywide goals and values, community needs, and approaches for building back better.

There are many other plans and programs throughout the City that support the Safety & Resilience Element, such as the Community Action Plan for Seismic Safety, the Neighborhood Empowerment Network, the Neighborhood Emergency Response Team, and the Lifelines Council. In addition to City-led actions, the Safety & Resilience Element relies upon the private sector, community-based organizations, and a range of additional stakeholders to support full and robust implementation of these policies.

GOALS, OBJECTIVES & POLICIES

Goal 1. All People Live In Safe & Healthy Communities

All stages of hazard management—mitigation, preparedness, response, recovery and reconstruction—are too important and too big a task for City agencies to take on their own. It would also be ineffective and may cause further harm to do so in a vacuum, without the involvement of the people most affected by hazards. Residentsand community members themselves must play a central role in decision-making.

The planning process must develop an education-based involvement opportunities that supports community leadership development. Planning efforts should not only identify, but actively engage, the varied interests of the community. These processes should include holistic information around hazards and impacts; contribute to the vision for the City's future per the General Plan and community outreach and engagement; and support the achievement of racial and social equity. As possible, identify responsible agencies, institutions, and other partners responsible for implementing strategies for safety and resilience.

The City should also help to develop community skillsets pre-disaster, on both an individual and neighborhood level, to empower community members to meaningfully participate in a post-disaster reconstruction planning process, work effectively together to identify and prioritize community needs, and work collaboratively with the City to communicate these needs and ensure that they are met. Programs such as the Neighborhood Empowerment Network (NEN) help to build community capacity and develop these essential skills before disaster strikes, so that everyone can participate effectively in the reconstruction process after the disaster.

OBJECTIVE 1.1.

JUST EMPOWERMENT. SUPPORT THE GROWTH OF COMMUNITY NETWORKS TO EMPOWER ALL PEOPLE.

POLICY 1.1.1.

Engage the community in the planning process.

Knowledge about geologic risks in the Bay Area is substantial, but always evolving. The City needs to keep informed, through the professional contacts of its staff, and through State and federal agencies like CalEMA and the United States Geological Survey, about advances in the field. New information will be shared with the public and decision-makers.

Similarly, new techniques are continually developing in the seismic design of structures, and new data is emerging about the actual seismic performance of previously retrofitted buildings. The risks of damage to life and property can be reduced by these improved engineering practices. The City should continue to support the institutions, professional organizations and individuals who carry out research in structural safety. Special attention should also be paid to support and seek out research that identifies innovative and low-cost retrofit concepts. Once the City sets new acceptable safety levels, this research should support the engineering requirements to meet safety levels.

POLICY 1.1.2.

During climate mitigation activities, prioritize investment and resources in Environmental Justice Communities, especially through existing community-based efforts.

During climate mitigation activities, the goal is to support the City become a net-zero emissions City by 2040 by reducing the amount and rate of greenhouse gas emissions. For many mitigation approaches, such as utilizing low-carbon transportation modes and electrifying buildings, it takes investment and resources to make these shifts in behavior at the individual and community level. Environmental Justice Communities and other vulnerable people should benefit from targeted investment and resources to make these changes. By prioritizing investment and resources into these communities, financial responsibility for climate action is shifted away from the people most adversely impacted by the climate crises. During project design and planning, specify how the scope, outreach, implementation, and budget serves the needs of these communities to mitigate their contributions to greenhouse gas emissions. In addition to reducing the amount and rate of greenhouse gas emissions, there can be additional community benefits in public health, local businesses, and quality of life. There can be opportunities to partner with existing community-based organizations and neighborhood-level efforts to effectively reach Environmental Justice Communities and other vulnerable people.

POLICY 1.1.3.

During emergency preparedness activities, inform all individuals about the risks, vulnerabilities, and consequences of their neighborhood and communities from all hazards through culturally competent and equitable communications.

Everyone should be equipped with the public awareness of how all hazards may affect the City, the potential impact on their lives, and what to do to exercise their resilience. The City must support widespread, current, and actionable public awareness activities for robust emergency preparedness. With greater awareness, the less likelihood of loss of life and harm and the more likelihood that people are safe and able to bounce back after disaster. As hazards are felt disproportionately across the City, it is vital that this information be made in culturally competent methods and equitably distributed to communities that are hard to reach, such as linguistically isolated

communities and communities across the digital divide. As part of racial and social equity assessments and vulnerability and consequences assessments, the City can support a centralized repository of hazards information, directories to resources and training, and accessible, neighborhood-level information. The City can support conducting research and training materials, distribution across culturally competent and mass communications streams, and identify resources that can activate readily in the event of a disaster.

POLICY 1.1.4.
Establish a network of staff supporting the Equity Officer to advocate and advise on equitable response, recovery, and reconstruction activities during and after a disaster.

In the Incident Command System (ICS) of the Emergency Operations Center (EOC), there is an Equity Officer responsible for incorporating equity, inclusion, and community needs into emergency response. The Equity Officer is built into the emergency response structure that will help reach all parts of the City in the event of a disaster. Based on lessons learned from the COVID-19 After Action Report for Phase I and Phase II, there is a strong need and opportunity to establish a network of staff during emergency response that have built trust with communities and neighborhoods.

This network of staff can serve as experts of neighborhood-specific and potentially block-level conditions, liaisons to community-based organizations and other stakeholders, and trusted messengers to vulnerable people. The staff should represent and work strongly with the American Indian, Black, and other communities of color and other vulnerable people. During all EOC activations, this network would coordinate to equitably implement response, recovery, and reconstruction activities. This network may have memorandums of understanding with key agencies and community stakeholders to support their integration into emergency management best practices.

POLICY 1.1.5.
During response activities, the City should partner with non-governmental entities to respond to hazard impacts in Environmental Justice Communities.

Partnerships with non-governmental entities can be critical to respond to the widespread impacts of a disaster. In the immediate aftermath of a disaster, these partnerships will facilitate the “all hands on deck” response to prevent further loss of life and ensure the City recovers more equitably and resiliently.

By laying the groundwork necessary for strong public-private partnerships in advance—by establishing relationships with universities, corporations, and foundations—the City can put itself in a strong position to receive support outside of regional, state, and federal aid, which could be critical if disaster is widespread and government resources must be extended. The City can activate public-private partnerships and partnerships with community-based organizations as a strong tool in revitalization after a community disaster.

Relationships with corporate entities, particularly those with local ties, can lead to financial and other support in reconstruction and restoration efforts. Relationships with community-based organizations and other neighborhood-level efforts can lead to increased outreach to people who are in need of support. Their local knowledge can support distribution of resources and programs, identify neighborhood-level or block-level challenges, and serve as trusted messengers of key information.

POLICY 1.1.6.
During recovery and reconstruction activities, rebuild in ways that remedy safety and resilience injustices in Environmental Justice Communities.

The City’s response efforts can be made stronger with robust partnership with its neighborhoods. Neighborhoods can be a driving force in recovery efforts. Residents, leaders, and community members understand the lived experiences and priorities of their neighbors, and they have more personal motivation to ensure projects and programs are carried out successfully. Often a lynchpin for rebuilding, preexisting community efforts and community-based organizations can readily provide a strong local force to extend the reach of government-provided recovery and reconstruction.

In recognition of neighborhoods’ critical role in recovery, the City should work to increase the capacity of neighborhoods and neighborhood groups. The City currently maintains a number of programs, such as Neighborhood Emergency Response Team (NERT) and the Neighborhood Empowerment Network (NEN), that empower community members and community-based efforts to participate in climate mitigation and disaster recovery efforts.

These programs should be viewed as part of developing a framework of efforts to prepare communities in advance of a disaster. This framework should encompass community outreach and the provision of information; emergency preparedness exercises such as mapping and planning; and other problem-solving activities to tackle the range of potential hazards. By building the capacity of neighborhoods pre-disaster, neighborhoods are more capable to support post-disaster decision-making around issues such as land use, transportation, and economic development.

The City should expand opportunities for community members to organize at a neighborhood- or block-level to facilitate strong social ties that serve in resilient recovery and reconstruction activities. Identify incentives to convene, share resources and tools, and identify community-level leadership development.

OBJECTIVE 1.2.

CONTINUOUS ASSESSMENT AND EVOLUTION. ACT BASED UPON BEST PRACTICES AND CONTINUOUSLY IMPROVE THE KNOWLEDGE BASE TO REMEDY PAST INJUSTICES AND ELIMINATE DISPARITIES.

POLICY 1.2.1.
In all stages of safety and resilience, prioritize the needs of people most impacted by the adverse impacts of hazards.

People are the most precious part of cities. As hazards occur, the adverse impacts are felt unevenly throughout the City. There are people who have higher vulnerability to hazard consequences and take longer to recover. Due to systemic inequities, there are people who are more likely to experience a hazard first and worst, and take longer to recover, than the City overall.

In order to support Environmental Justice Communities and other vulnerable people, the City must identify and prioritize the needs of people most impacted by hazards in all safety and resilience efforts. The City must increase baseline understanding of disproportionate inequities (causes), impacts (effects), and opportunities to increase safety and resilience (solutions). The City must continuously update this understanding by identifying critical needs and infrastructure, conducting racial and social equity assessments, conducting outreach and engagement activities, and incorporating racial and social equity indicators into the evaluation and monitoring of programs.

POLICY 1.2.2.
Use the latest assessment tools provided by the Office of Racial Equity and Department Racial & Social Equity Action Plans to center racial and social equity into the planning, evaluation, and monitoring of programs.

In City efforts for safety and resilience, racial and social equity must be incorporated into the planning, evaluation, and monitoring of all programs. For applicable programs, perform racial and social equity assessments and the latest tools provided by the respective agency's Racial & Social Equity Action Plan and the Office of Racial Equity. These tools provide high-level guidance to understanding and centering racial and social equity into projects and programs. The tools require consideration at each step of the decision-making process, as to who would benefit or be harmed by a certain action, and by iteratively considering these questions to generate better results.

POLICY 1.2.3.
Prioritize documentation of historic, archaeological, and intangible cultural resources in the most vulnerable areas to the climate crisis, starting in Environmental Justice Communities.

San Francisco's historic and cultural resources are critical to the City's identity. They contribute to the City's unique character, support heritage tourism and economic development, and hold stories of the diverse communities who have called San Francisco their home. The City must continuously understand and preserve these resources and offer reasonable protection from current and future hazards. The City should prioritize documentation of historic, archaeological, and intangible cultural resources in areas most vulnerable to the climate crisis, such as areas within the Sea Level Rise Vulnerability Zone, as these resources may be experience irreparable damage or be completely lost.

Efforts are underway to document, preserve, and protect these assets, including resources that may become inundated by sea level rise or may collapse from an earthquake. However, the timing, severity, and impact of hazards such as earthquakes, floods, and fires are not fully understood. Hazards could severely damage or completely destroy buildings, building features, or artifacts within buildings.

Having a comprehensive cultural resource survey is critical for both hazard risk assessment and post-disaster recovery. The San Francisco Citywide Cultural Resources Survey identifies important individual historic or cultural resources and potential districts throughout the City. Additionally, the City can employ tools such as photographs, architectural drawings, oral histories with community knowledge and culture bearers, 3D laser surveys, and/or digital technology to archive and research these resources. The City can also explore the latest approaches to documenting these resources, as more is learned about preservation and adaptation from hazards such as poor and hazardous air quality and extreme storms.

POLICY 1.2.4.
Prioritize funding for infrastructure maintenance and improvements in Environmental Justice Communities.

Environmental Justice Communities and other vulnerable people often rely more heavily on critical pieces of City infrastructure than communities with more resources, higher quality options, and privilege. Infrastructure provides public services such as transportation, water, energy, and internet. These infrastructure assets and systems are essential for people living, working, and playing in the City. It is important to fund the operation, maintenance, and improvements of such infrastructure and prioritize the needs of the communities who are more reliant on their services.

Goal 2. Multi-Benefit Climate and Hazard Resilience

Pursue multi-hazard risk reduction strategies and maximize community benefits along the way to becoming a net-zero emissions City by 2040.

OBJECTIVE 2.1.

CLIMATE RESILIENCE. **PURSUE SYNERGISTIC EFFORTS THAT BOTH ELIMINATE GREENHOUSE GASES (CLIMATE MITIGATION) AND PROTECT PEOPLE, THE BUILT ENVIRONMENT, AND NATURE FROM THE UNAVOIDABLE IMPACTS OF THE CLIMATE CRISIS (CLIMATE ADAPTATION).**

POLICY 2.1.1.
Coordinate the regular update of implementing documents of this General Plan including: the Hazards and Climate Resilience Plan (HCR) and the Climate Action Plan (CAP), both incorporated by reference here, as well as the Emergency Response Plan (ERP) and the Recovery Plan (pending).

The Hazards and Climate Resilience Plan (HCR), incorporated by reference here, serves as the City's local hazard mitigation plan to the Federal Emergency Management Agency (FEMA). It addresses all hazards the City is at risk to and strategies to mitigate from harm. It serves as a tracking and monitoring tool, with annual reporting to FEMA. The Climate Action Plan (CAP), incorporated by reference here, guides how the City can reduce greenhouse gas emissions to net-zero by 2040, building on the City's climate and sustainability framework, "0-80-100-Roots." This framework aims for zero waste, 80% of trips taken by low-carbon transportation modes, 100% renewable energy, and carbon sequestration. The Emergency Response Plan (ERP) provides an immediate action plan to coordinate response to disaster. It includes an overview of the emergency management system, detailed and restricted information for the Emergency Command Center, and a set of functional and hazard-specific details.

The Recovery Plan is planned to be produced by the City. The Recovery Plan can serve as the advance planning document to guide long-term recovery and reconstruction post-disaster for all hazards that the City faces.

These documents should be coordinated and be regularly updated to ensure the City is best positioned to equitably protect people from all hazards and the climate crisis.

POLICY 2.1.2.
Direct City actions to reduce local contributions towards the climate crisis by mitigating greenhouse gasses and by increasing carbon sequestration.

Globally, scientific consensus on the threats of climate change and the current climate crisis has been widely agreed upon for many years. The climate crisis increases the frequency of natural disasters and threatens life and wellbeing, the economy, and more. In 2019, the City declared a climate emergency and strengthened plans for net-zero greenhouse gas emissions.

According to the 2022 Intergovernmental Panel on Climate Change Sixth Assessment Report, human-induced global heating is causing dangerous and widespread disruption in nature and affecting the lives of billions of people around the world, despite efforts to reduce the risks. Multiple climate hazards will occur simultaneously, and multiple climatic and non-climatic risks will interact, resulting in compounding the overall risks cascading across sectors and regions. For example, increased heatwaves, droughts, and floods are already exceeding the tolerance thresholds of plants and animals, driving mass mortalities in species such as trees and corals. These weather extremes are occurring simultaneously, causing cascading impacts that are increasingly difficult to manage. They have exposed millions of people to acute food and water insecurity, especially in Africa, Asia, Central and South America, on Small Islands, and in the Arctic.

To avoid mounting loss of life, biodiversity, and infrastructure, ambitious and accelerated climate adaptation is required, at the same time as making rapid, deep cuts in greenhouse gas emissions. So far, adaptation progress is uneven and there are increasing gaps between action taken and what is needed to deal with the increasing risks, the new report finds. These gaps are largest among lower-income populations.

The United Nations Intergovernmental Panel on Climate Change reported a dire warning about the consequences of inaction on the climate crisis, that due to human-induced global heating, the world "faces unavoidable multiple climate hazards" over the next two decades with global warming of 2.7°F (1.5°C). San Francisco has committed to local action to limit further warming through a goal of net-zero sector-based emissions by 2040, a 90% reduction from 1990 levels, and an interim target of cutting sector-based emissions 61% below 1990 levels by 2030.

The Climate Action Plan describes the strategies necessary to reach emissions reductions goals by sector:

- **Zero Waste:** By 2030, reduce solid waste generation by at least 15% below 2015 levels, and reduce solid waste disposed of by incineration or deposit in landfill by at least 50% below 2015 levels.
- **Transportation:** By 2030, increase low-carbon trips to at least 80% of all trips measured, and increase electrification of vehicles to at least 25% of all private vehicles registered. By 2040, in-crease electrification of vehicles to 100% of all private vehicles registered.
- **Energy:** By 2025, supply 100% renewable electricity, and by 2040, supply 100% renewable energy.
- **Housing:** Build at least 5,000 new housing units per year with maximum affordability, including not less than 30% affordable units, with an emphasis on retaining and rehabilitating existing housing.
- **Buildings:** By 2021, require zero onsite fossil fuel emissions from all new buildings, and by 2035, require zero onsite fossil fuel emissions from all large existing commercial buildings.
- **Roots:** Sequester carbon through ecosystem restoration, including increased urban tree canopy, green infrastructure, and compost application.

POLICY 2.1.3.
The City shall create and implement a Recovery Plan to facilitate robust social, economic, and environmental recovery post-disaster.

The experiences of New Orleans, Louisiana and the Gulf after Hurricane Katrina in 2005 illustrate the need for local jurisdictions to perform advance planning. Before a disaster strikes, there may be more resources within the community and within local government available. While the specifics of recovery would vary depending on hazards and impacts, certain aspects of recovery can be facilitated by advance planning.

The Association for Bay Area Governments produced a model recovery plan for the City of Oakland. A local recovery plan for the City should be centered in racial and social equity and should include, but not be limited to, the following topics discussed in Oakland's plan: financing recovery issues; recovery of government facilities and services; land use change; and the long-term recovery of housing, business, health care, schools, utilities, and transportation.

POLICY 2.1.4.
Ensure that City projects and private developments provide multi-benefit solutions that mitigate hazard risk and contribute to a zero-emission future.

With limited resources and capacity, it becomes more important that large development projects provide as much comprehensive benefit to the community as possible. The climate crisis is worsening conditions on the ground, and hazards are occurring more frequently, intensely, and simultaneously. A development project must consider a broad set of hazards and prepare holistically for the project's climate resilience, while actively reducing greenhouse gas emissions to contribute to Climate Action Plan targets and goals. Options for projects to reduce emissions include carbon sequestration through urban greening and native planting, building electrification, and connection to renewable energy.

OBJECTIVE 2.2.

MULTI-HAZARD RESILIENCE AND CO-BENEFITS. IN ADAPTATION AND MITIGATION INVESTMENTS TO MULTIPLE AND SIMULTANEOUS HAZARDS, MAXIMIZE RISK REDUCTION STRATEGIES AND THE RELATED COMMUNITY BENEFITS.

POLICY 2.2.1.
Include multi-hazard risk assessments in private development, capital projects, and the City's climate resilience programs.

With limited resources, and the worsening effects of the climate crisis, the City must extend the reach of every dollar spent on climate adaptation. The City must evolve the approach to climate adaptation and address how hazards are occurring more frequently, intensely, and simultaneously. In the project design and planning, incorporate how projects can deliver on a broad set of values and goals of the City.

With multi-hazard risk assessments, programs and projects need to consider the near- and long-term risks of all hazards. ClimateSF, the City's coordinated climate resilience interagency group, can support connecting climate resilience to intersecting issues across housing, health, transportation, and other public benefits. The General Plan can also determine opportunities for projects to support public benefits.

In private development and capital projects, development plans should ensure new development is designed and constructed to ensure functional recovery—beyond life safety expectations—in the event of all hazards. For known hazard risks, such as liquefaction on landfill areas, development should seek a performance equivalent to that of similar structures built on firm ground. For development within the Air Pollution Exposure Zone (APEZ), the plan should provide as healthy indoor air as projects that are outside the APEZ.

The project teams should conduct outreach and engagement to assess and understand the complete set of hazards and associated vulnerabilities in a project geography, especially as they relate to environmental justice. The assessments should support expanding the impact of resources directed at a singular hazard to develop multi-benefit strategies and solutions for projects and communities. Work with stakeholders, community members, and the private sector to assess and understand the complete set of hazards and associated vulnerabilities in a major development's surrounding area.

POLICY 2.2.2.
Examine the risk of flooding and evaluate adaptation actions that will protect people and the built and natural environments to help inform land use, capital investment, and other policies.

Despite best efforts to reduce greenhouse gas emissions and mitigate against the climate crisis, current CO2 levels are already causing changes in weather patterns, more extreme weather events, and an increase in sea levels. Even if greenhouse gas emissions were halted today, the long half-life of many greenhouse gasses and the change in global ocean temperatures mean that we will be experiencing consequences of increased CO2 in the atmosphere for centuries.

There is potential for permanently inundated land to greatly increase from the climate risk and associated flooding from storm surges, increased participation, sea level rise, and groundwater rise. With worsening conditions and without adaptation action, flood hazards will expand and alter the current 100-year floodplain and Sea Level Rise Vulnerability Zone, making many more people and structures vulnerable than currently. The City should continue to review scientific emissions and sea level rise projections to become fully aware of risks to health, safety, and reliable functioning of City infrastructure systems due to flooding, as well as support the institutions, professional organizations and individuals who carry out climate research. In certain areas of the City, such as Environmental Justice Communities, neighborhoods may be affected by the intersection of increased flooding and increased exposure to toxic substances. There is ongoing research to explore how flooding, especially groundwater rise, affects the mobilization of toxic substances from contaminated soils, and the related public and environmental health impacts.

The risk of flooding needs to be taken into account when making land use decisions, bearing in mind that perceptions of acceptable risk may change in the future. These risks should also be incorporated into appropriate City plans and policies, such as the Planning and Zoning Codes, and capital planning. The Planning Commission, Board of Supervisors, and other City decision-making bodies should be fully apprised of these risks as they conduct reviews.

The City should review best practices, case studies, and current technology to mitigate these potentially harmful effects and adapt to future conditions that will reduce loss of life, build structures, and infrastructure. Adaptation actions should be considered for feasibility, and they should be incorporated into seismic upgrades and routine maintenance if possible. The adaptation strategies can include, but are not limited to: building elevation, floodproofing, green infrastructure and ecological/habitat features, hard engineering, zoning/code changes, and relocation of sensitive assets.

POLICY 2.2.3.
Seek sufficient funding to address climate hazards through all phases of mitigation, preparedness, response, recovery, and reconstruction.

Each phase of disaster planning (mitigation, preparedness, response, recovery, and reconstruction) requires their own planning, design and engineering, construction, maintenance and operations, and ongoing monitoring. Providing sufficient staff and budget resources for interagency coordination is no small feat. Further, equitable distribution of funding—considering historic disinvestment in certain communities—requires heightened consciousness to resource allocation and providing opportunities for community input and decision making.

The 10-Year Capital Plan provides an approach for long-term efforts to be balanced with immediate needs. The Capital Plan should prioritize funding for 1) Environmental Justice Communities for the specific threats they face being compounded by systemic inequities; 2) specific hazard threats poised in vulnerable areas; 3) areas and functions that serve the most people 4) projects with matching state and federal funding; and 5) investments that support achieving a state of good repair of existing infrastructure and assets. The traditional cost-benefit models to determine funding needs have been built around tax and economic revenue, which continues cycles of disinvestment in historically disadvantaged and disinvested areas. Instead, holistic cost-benefit models should consider social, economic, and environmental costs and benefits.

POLICY 2.2.4.
Adapt the City's bay and ocean shorelines to current and future climate flood hazards, including coastal flooding, sea level rise, groundwater rise, and extreme storms.

The City faces threats from the slow-moving disasters of sea level rise and flood hazards. Surrounded on three sides by water, the City must adapt the bay and ocean shorelines to these hazards to prevent inundation; spread of environmental pollutants; disrupted services of key assets such as utilities and underground rail; assets and property damage; and loss of open space, neighborhoods, and communities.

The City should develop adaptation strategies to address current and future hazards for the bay and ocean shorelines. Building off of the Sea Level Rise Action Plan, the City should develop a citywide adaptation plan that addresses the interaction between sea level rise, coastal and inland flood hazards, and extreme storms. The adaptation plan should include a model of these joint hazards and have neighborhood-specific analysis, especially in low-lying areas in the Sea Level Rise Vulnerability Zone, like Mission Creek, Islais Creek, and Yosemite Slough.

The adaptation strategies may use a combination of measures, including flood defenses, accommodation strategies such as floodproofing, elevating sensitive equipment, operational policies, and removal or relocation of sensitive assets. Flood defense measures should incorporate natural or ecological features as much as possible. Adaptation strategies should be reviewed and amended over time as conditions and flood projections evolve. They should build in redundancy to provide extra protection should flood defense structures fail.

OBJECTIVE 2.3.

NATURE-BASED SOLUTIONS. ENHANCE NATURE, BIODIVERSITY, AND PUBLIC OPEN SPACE THROUGH CLIMATE RESILIENCE STRATEGIES THAT MIMIC OR RESTORE ECOLOGICAL SYSTEMS AND FUNCTION.

POLICY 2.3.1.
Maximize the preservation and maintenance of carbon sinks and landscape approaches that advance the rate of carbon sequestration.

An essential element of becoming a net-zero emissions City is pursuing carbon sequestration, the capture and storage of greenhouse gas emissions. Trees, other flora, especially native plants, should be preserved, maintained, and increased as carbon sinks in the City. Native plants should be prioritized in pursuit of the City's carbon sequestration, water management, and biodiversity goals.

There are many City agencies involved in this work, such as Public Works, Recreation and Parks, Department of the Environment, the Public Utilities Commission, and the Port. Public Works has ongoing efforts to plant trees throughout the City that are sequestering carbon through tree photosynthesis. Recreation and Parks offers plant palettes to maximize climate resilience in park landscapes and engages in climate resilient land management by repurposing green waste as mulch and chip cover.

POLICY 2.3.2.
Prioritize nature-based solutions that restore ecosystem function and maximize ecological benefits to plants, animals, and people.

For climate resilience, nature-based solutions offer approaches to restore ecosystem function and maximize ecological benefits. In capital, development, and other projects, incorporate greening and plantings that are climate appropriate, non-invasive, and native species into the building and surrounding infrastructure. Where possible, design solutions that make ecosystem function visible so that relationships between people and nature can be understood, cultivated, and appreciated. For open space projects, it is important to coordinate with the American Indian and Alaska Native community to preserve existing culturally significant areas and ensure access to culturally significant practices, such as harvesting food from the area.

POLICY 2.3.3.
Prioritize nature-based solutions as flood adaptation strategies, to enhance shoreline biodiversity and ecological function, manage stormwater, and protect against sea level rise and coastal flooding.

Against the present and increasing threats of sea level rise and flood hazards, prioritize the use of nature-based solutions and green infrastructure to increase climate resilience. The unique characteristics of these water-related hazards present the opportunities for both site-specific and district-scale solutions to manage stormwater and protect against sea level rise and coastal flooding. For greater climate resilience, prioritize nature-based solutions that enhance ecological function, preserve the natural aspects of the shoreline, and reconnect people to these systems.

The nature-based solutions, such as wetlands, should be adapted to the condition of the shoreline. Where possible, consider soft landscape transitions to the bay, ocean, and creeks that maintain public access, especially visual access, to these water features. In areas with limited space for soft landscape transitions, consider vertical strategies such as living or ecological seawalls.

POLICY 2.3.4.
Reduce the threat of wildfire to San Francisco residents and infrastructure.

Though the probability of wildfires within San Francisco is low, it remains high for areas outside the county where City-owned infrastructure is located. Significant portions of the Hetch Hetchy Regional Water System in San Mateo, Alameda, Santa Clara, and Tuolumne Counties are located in very high fire hazard lands. Coordinate with Yosemite National Park, Stanislaus National Forest, CAL FIRE, and adjacent communities on risk reduction, and properly care for City-owned land and facilities to reduce wildfire risk.

A small portion of the Crocker Amazon neighborhood has been designated as a high fire hazard area by the State. There are potable water mains and hydrants along the perimeter of John McLaren Park, as well as a 2015 era 75,000 gallon Emergency Firefighting System cistern at the corner of Moscow and Geneva.

POLICY 2.3.5.
Educate and empower stakeholders and communities to know, grow, and steward local native plants and wildlife on private and public property.

Property owners and other stakeholders can take the lead in nature-based solutions and urban greening with more support from the City. The City should develop a centralized repository of information and training to increase public awareness of climate appropriate, non-invasive, and native plants and wildlife on private and public property. For public property and open space, it is important to ensure the American Indian and Alaska Native community have access to conduct cultural practices, such as harvesting.

Goal 3. Hazard Mitigation

The City must reduce the likelihood, scale, and severity of impacts from all disasters to the economy; the built and natural environment; and all communities, starting with reducing such impacts in Environmental Justice Communities.

The climate crisis already adversely impacts San Francisco and influences how people live, work, and play. The climate crisis will accelerate impacts for decades to come. In San Francisco, there are 13 main hazards that have the most potential impact to the City. Of these hazards, seismic hazards pose the greatest direct risk to human life and safety via the failure of buildings and other structures during shaking or ground failure. In addition to tragedy, there will be substantial economic losses and severe social, cultural, and economic dislocations. These same consequences are threats across all other hazards, including slow-moving hazards such as sea level rise and emerging hazards such as poor and hazardous air quality. As the climate crisis worsens, hazards are occurring more frequently, intensely, and simultaneously—with compounding impacts. It is critical to ensure robust levels of safety and resilience relative to all hazards, by learning more about the risks posed to vulnerable communities and developing plans to reduce those risks; and by considering hazards in all land use, infrastructure, and capital planning.

OBJECTIVE 3.1.

EXISTING BUILDINGS. **ENSURE RETROFITS AND RENOVATIONS TO EXISTING STRUCTURES INCREASE BUILDING LONGEVITY AND MEET CURRENT BEST PRACTICES TO PROTECT OCCUPANTS AND STRUCTURES.**

Risk Reduction

POLICY 3.1.1.
Reduce the risks presented by City-owned structures and privately-owned buildings and provide assistance to vulnerable communities with limited adaptive capacity to reduce those risks.

Hazards such as earthquakes can cause damage to buildings that render them unsafe to occupy or cause them to collapse. Sea level rise and flood hazards can cause permanent inundation. Poor and hazardous air quality can exacerbate indoor and outdoor air pollution. The City needs a comprehensive approach to address the resilience of all at-risk structures and buildings where people live, gather, and work.

While the City has numerous programs in place to bring public buildings into seismic compliance, addressing privately-owned buildings is a political, legislative, and financial challenge. The Community Action Plan for Seismic Safety (CAPSS) and Earthquake Safety Implementation Program (ESIP) is a 30-year implementation plan to support the City's resilience in the face of probable earthquakes along the San Andreas and Hayward Faults. These programs address seismic risk reduction for many building uses, such as residential and commercial.

The City should create additional action plans and implementation plans to address the range of hazards that are occurring more frequently, intensely, and simultaneously. These actions should address non-ductile concrete frame buildings, old construction in need of retrofits, pre-cast concrete tilt-up buildings, and housing units that serve low- and very low-income residents.

POLICY 3.1.2.
Reduce the risk of all hazards, especially geological, weather-related, and fire-related hazards, posed by concrete buildings and older, small, wood-frame residential buildings.

The City's current programs for unreinforced masonry buildings and soft-story wood-frame buildings apply to larger scale and commercial structures. Individual homes or buildings under 5 units are not required to be seismically strengthened. Some individual homeowners make upgrades to their buildings voluntarily, but that number could be substantially increased with more programs designed for safety improvements by homeowners. "Soft-story" buildings, in which the ground story has much less rigidity and strength than the rest of the structure, pose significant hazards. Often, the soft story is the result of multiple garage door openings or ground floor parking. Soft-story failure was responsible for nearly half of all homes that became uninhabitable in the 1989 Loma Prieta Earthquake. Photographs of the Marina District became iconic symbols of the compounded seismic risks from earthquake and liquefaction for housing built on top of landfill, loose, or saturated soils. The City estimates 43% to 85% of un-retrofitted soft-story buildings will be uninhabitable following a major earthquake.

The City should adopt incentives and regulations to encourage relatively simple retrofit approaches that increase the structural stability and safety of smaller wood-frame residential buildings, as well as consider a phased mandate for retrofits over a 30-year timeframe as directed by the Community Action Plan for Seismic Safety and the Earthquake Safety Implementation Plan. The City's Mandatory Soft Story Retrofit Ordinance established an inventory of buildings with five or more units and required their owners to evaluate and retrofit at-risk buildings. This program has been successful, with an 85% compliance rate for buildings that fall within the program's purview. Next, the City should enact a concrete building retrofit program, in accordance with the Earthquake Safety Implementation Plan. Older non-ductile concrete frame buildings and rigid wall flexible diaphragm buildings, aka "tilt-ups" with high-level risk should be addressed.

POLICY 3.1.3.
Abate structural and non-structural hazards in City-owned properties.

Both technical and financial resources are needed to repair and retrofit City-owned properties. The City shall use its capabilities to assess hazards and to create and implement bond and other funding opportunities to carry out retrofit projects. Through bond financing, numerous City buildings have already been structurally upgraded.

There still remain important City-owned buildings that present seismic risks, as identified in the 10-Year Capital Plan, Hazards and Climate Resilience Plan, and other studies and plans.

The City's Capital Improvement Advisory Committee (CIAC) acts as the policy body advising the City's capital-planning process. Recognizing that certain kinds of public buildings are critical to the community's functioning, the CIAC should work to establish a clear prioritization for these projects, develop an implementation program for their upgrade including funding sources (such as bond measures), and establish a timeline for the improvements.

POLICY 3.1.4.
Encourage property owners to evaluate their risks to all hazards.

Many property owners hold a misguided perception that federal and state sources will provide financial assistance after a disaster. But, federal aid provided in a declared disaster does not protect individual homeowners. When a major disaster hits an entire area, local governments are often strapped with simply providing funds necessary to repair major public infrastructure and buildings.

The City can encourage residents and businesses to evaluate their own risk and the repercussions they might face from reasonably foreseeable hazards. Whether through a formal risk assessment through a qualified consultant or simply through a personal assessment that evaluates the potential for damage, property owners should consider the full range of opportunities for decreasing their risk. This risk should be clearly communicated to tenants, upon sale of buildings, and be made part of public City records.

POLICY 3.1.5.
Support the ability to shelter in place and provide help for vulnerable communities with limited adaptive capacity.

The term "shelter in place" refers to people's ability to remain in their home or another place of shelter and stay there until instructed otherwise, due to ongoing hazards outside of the home that threaten health and life safety.

Seismically, for a building to have shelter-in-place capacity, it must be strong enough to withstand a major earthquake without substantial structural or non-structural damage. This is a different standard than that employed by the Building Code, which requires buildings to meet life-safety standards. In some cases, a building may not collapse, but might be deemed unusable because of the level of damage. Shelter-in-place housing standards would mean that a building is safe enough to live in during the months after an earthquake, but it may not be fully functional as a hospital or other public facilities would need to be.

Supporting shelter-in-place capacity can help minimize the need for emergency housing and services post-disaster, keep current residents in their homes, and minimize disruption of society and the economy. This could greatly minimize recovery costs and allow communities to remain intact.

Historic Preservation

POLICY 3.1.6.
Maintain a data clearinghouse of existing housing and building stock that inventories their features' architectural and cultural character, vulnerability and resilience to all hazards, and other resilience features.

In order to make holistically-informed approaches and strategies to improve the safety and resilience of the City's housing and building stock, the City needs a complex set of readily available, current, and high-quality data. The data on housing and building stock, including its location, specifications, conditions, and use, is managed by a number of City agencies and private sector actors, making it difficult to conduct research, assess the vulnerability and consequences to hazards, and identify opportunities to increase safety and resilience.

The City should develop and maintain a data clearinghouse that supports existing and projected housing and their interaction with all hazards. This clearinghouse can demarcate types of structures and buildings with known vulnerability to hazards, such as concrete buildings and wood-frame buildings, and denote opportunities for improving resilience, such as removing gas lines. The clearinghouse can utilize property information from past and current building surveying efforts, including the San Francisco Citywide Cultural Resources Survey (SF Survey), as well as existing information found on the Planning Department's Property Information Map.

POLICY 3.1.7.
Starting with properties associated with Environmental Justice Communities, expand life safety and functional recovery considerations to increase the likelihood that historically valuable architecture and structures will survive all hazards, and encourage the adaptive reuse of historic structures.

Older buildings are among those most vulnerable to destruction or heavy damage from a large earthquake. They are less likely to have more recent engineering features or be built to current codes. This makes these buildings less resilient to ground shaking, and many of them are located in areas near the bay and the historic bay inlets with the City's softest soil conditions. These buildings may also have ornate façade structures that, in the event of an earthquake, can detach and threaten people on the street.

A major earthquake could result in an irreplaceable loss of the historic built fabric and social communities of San Francisco. Part of the City most vulnerable to fire also contains many historic structures. North Waterfront, South Beach, Mission Bay, Potrero Hill, Hunters Point, Civic Center, Downtown, Tenderloin, and Hayes Valley neighborhoods have moderate risk for large urban fires. Additionally, San Francisco's waterfront is lined with historic structures, including historic pier structures, vulnerable to risks posed by current flooding and accelerating sea level rise. Furthermore, stormwater flooding may pose risks to properties more inland in neighborhoods including the Mission, South of Market, and Bayview. The City should mitigate these hazards in a way that preserves the historic structures and fabric of the different neighborhoods.

When new programs are being considered to abate hazards posed by existing buildings and structures, the likely impacts of those programs on historic buildings must also be thoroughly investigated. The resulting programs should encourage the retrofit of older buildings in ways that preserve their architectural and historical character while increasing life safety and functional recovery. When development concessions, transfers of development rights, or City funds are granted to promote preservation of historic buildings, there should be reasonable measures taken to increase the building's resiliency to environmental hazards.

POLICY 3.1.8.
Safeguard diverse elements of the City's living heritage through supporting the protection and/or adaptation of intangible elements and their ties to the City's natural and built environments, which collectively contribute to San Francisco's cultural identity.

In the event of a hazard, there may be damage to the people, resources, and opportunities that contribute to San Francisco's living heritage. These diverse and intangible elements of living heritage, such as performing arts, traditional crafts, foodways, rituals, and festivals, must be protected and adapted against the threats of all hazards.

After a hazard, the unique materials and supplies necessary for living heritage may be destroyed or heavily damaged beyond function. The opportunities and space to come together and practice rituals and festivals may be lost or deemed unsafe. The people and communities who own, practice, and appreciate acts of living heritage may be lost or displaced.

The City should identify the elements that contribute to San Francisco's cultural identity, as that identity has been and may be evolving over time, and work to safeguard these elements from the threats of all hazards.

Resilient Retrofits

POLICY 3.1.9.
Reduce hazards from gas-fired appliances and gas lines, removing gas lines when possible, focusing on communities with concentrations of older housing stock.

In support of the City's goals of becoming a net-zero emissions City by 2040, the City is minimizing reliance on gas and instead electrifying the future. For the remaining gas lines, the City must protect people and assets from seismic, combustion, and related hazards.

A large earthquake is likely to result in fires at a time when the water systems may be disrupted and fire-fighting personnel may be overtaxed. One of the common sources of ignition will be gas leaks from appliances. As part of removing gas lines, support the infrastructure for building electrification. In existing buildings, the San Francisco Lifelines Council recommends the Department of Building Inspection to require electrification with gas shut-off valves as an interim measure to full building electrification.

POLICY 3.1.10.
During building retrofits, follow a comprehensive retrofit strategy to provide support to vulnerable communities, reduce greenhouse gas emissions, and reduce the risk of property loss and damage during wildfires, flooding, and seismic hazards.

During building retrofits, there is opportunity to address a broad range of hazards at once. In addition to improving building resilience, there are improved protections for human safety and prevention of damage and loss of life. The retrofit strategy should address the main hazards the area is susceptible to, including seismic hazards, sea level rise and flooding, urban fire, and poor and hazardous air quality. Building retrofits, which include weatherization and electrification, are needed to meet San Francisco's goal of net-zero greenhouse gas emissions by 2040.

POLICY 3.1.11.
For existing housing and building stock, provide training, guidance, and assistance to build resilience against extreme heat, poor and hazardous air quality, and flooding, especially in Environmental Justice Communities and other vulnerable people.

There is a set of emerging hazards occurring more frequently and severely in the City, exacerbated by the climate crisis. These hazards, such as extreme heat, poor and hazardous air quality, and sea level rise and flooding, are challenging existing approaches to make existing housing and building stock resilient to hazards. As compared to new and projected housing units, the existing housing and building stock—especially older stock—often serve as the City's valuable resource of affordable housing.

For housing security and housing that is safe, healthy, and affordable to people, the City should provide training, guidance, and assistance to weatherize and retrofit. For example, the City can address temperature control, indoor air quality, and elevating property. These resources should be targeted to Environmental Justice Communities and other vulnerable people.

POLICY 3.1.12.
Provide guidance and assistance to residents about the risks associated with their home and their options to improve safety as renters.

San Francisco residents should be informed about the hazard risk profile of their homes and neighborhoods. For existing buildings and new construction, property owners and residents should be notified and informed. The City should pursue policies around mandatory reporting around seismic risk, such as during the time of sale or as permanent notice in building entryways. The City should pair notification with opportunities to learn more, such as pointing to an online directory of hazard and neighborhood profile information and opportunities to increase resilience of housing units.

OBJECTIVE 3.2.

NEW BUILDINGS. **MAXIMIZE THE SAFETY, ENVIRONMENTAL PERFORMANCE, AND CLIMATE ADAPTABILITY OF ALL NEW DEVELOPMENT.**

Hazard Information in Decision Making

POLICY 3.2.1.
Continue to support and monitor research about the nature of all hazards in the Bay Area, including prediction and warning systems, community vulnerability and consequences assessments, and improvements to building performance

and resilience.

Knowledge about hazard risks in the Bay Area is substantial, but always evolving. The City needs to stay informed, through City staff, state and federal agencies like CalOES and the United States Geological Survey, and other professional contacts about advances in the field. New information will be shared with the public and decision makers.

Similarly, new techniques are continually developing in the structural design of structures, and new data is emerging about the actual functional performance of previously retrofitted buildings. For example, the risks of damage to life and property from seismic hazards can be reduced by improved engineering practices. The City should continue to support the institutions, professional organizations, and individuals who carry out research in structural safety. Special attention should be paid to support and seek out research that identifies innovative and low-cost retrofit concepts. Once the City sets new acceptable safety levels, this research should support the engineering requirements to meet safety levels. Similarly, new techniques are continually developing to protect building occupants from poor and hazardous air quality, extreme storms and flooding, and pandemic.

POLICY 3.2.2.
Research and maintain information about all hazards, including adverse impacts on vulnerable communities.

The field of disaster research is growing in both scope and recognition. In recent decades, the September 11 attacks in 2001, the Indian Ocean earthquake and tsunami in 2004, Hurricane Katrina in 2005, the Haiti earthquake in 2010, and the COVID-19 pandemic starting in 2019 are major examples. While research into disasters focused primarily on natural disasters through environmental management, newer research strains extend into terrorism and cyber failures, biological and chemical emergencies, and other community-wide crises. They encompass research components such as organizational response to disasters and the social ramifications of hazards, disasters, and large-scale terrorist attacks.

In addition to the science and management of all hazards, the field is increasingly aware of the disproportionate impact of disaster among different groups of people and the need to prioritize attention to the people most vulnerable to risks and consequences. As hazards occur more frequently, intensely, and simultaneously, it is often Environmental Justice Communities and other vulnerable people who experience the impacts of disaster first and more severely, and who take longer to recover compared to the rest of the City. For some people, they have the resources and adaptive capacity to bear a disaster and recover to pre-disaster levels with relative ease. For vulnerable communities, there are higher risks, limited resources, and constrained adaptive capacity, meaning that research on all hazards should account for these dynamics of adverse impact and work to address these community needs.

The Department of Emergency Management should keep abreast of evolutions in this field of research, particularly as new threats emerge and as new methods of mitigating those are developed. The City should also continue grow its partnership with community response teams, such as the Neighborhood Emergency Response Team (NERT) and the Neighborhood Empowerment Network's Empowered Communities Program (ECP). NERT is a community-based training program dedicated to a neighbor-helping-neighbor approach to disaster response. The NERT program trains volunteers to work as members of an emergency response team, preparing them to respond to a personal emergency or assistance to Fire Department response. ECP is a community development approach to neighborhood-level disaster resilience, empowering neighborhoods to develop and implement strategies that strengthen communities during hazard events.

POLICY 3.2.3.
Coordinate interagency Citywide efforts to assess the City's vulnerabilities to multiple hazards, such as poor air quality, flooding, and extreme heat.

As the City continues to experience more extreme, more frequent, and more simultaneous hazards, the interagency climate resilience program should be empowered to assess the City's vulnerabilities to a complex set of hazards. The City should develop a citywide assessment, at the neighborhood level, to generate baseline information around the vulnerabilities and consequences to all hazards. This assessment should include impacts on Environmental Justice Communities and other vulnerable people, businesses and the economy, historical and cultural resources, and critical infrastructure. This assessment should support increasing public awareness for emergency preparedness. Currently, there is ClimateSF as an interagency collaboration to advance the City's climate resilience activities, including the Office of Resilience and Capital Planning, Planning Department, Department of the Environment, the Port, and Public Utilities Commission.

POLICY 3.2.4.
Ensure foundations and structural systems are designed with consideration of site soils conditions when reviewing projects in areas subject to liquefaction, slope instability, sea level rise, groundwater rise, and other flood hazards.

The Building Code considers soil conditions at a very general scale. But, soil conditions vary enormously throughout the City. Different soil conditions can result in very different earthquake impacts and can result in damage at other times, such as with landslides. Because of the importance of soil conditions, the California Seismic Hazards Mapping Act requires that a geotechnical investigation and geotechnical report be prepared for new or renovated buildings that are constructed in Seismic Hazard Zones.

Pursuant to this act, the Department of Building Inspection (DBI) requires geotechnical reports prepared by a licensed geologist and geotechnical engineer for projects in areas with susceptibility to ground failure, including liquefaction and landslides. DBI has procedures in codes and bulletins identifying when projects are subjected to additional geotechnical review and requirements based on site conditions and/or proposed scope of work to support these efforts.

Additionally, there is ongoing research of the interaction of sea level rise and flood hazards with the potential mobilization of soil contamination.

POLICY 3.2.5.
Provide training, guidance, and assistance for the geotechnical and foundation issues unique to tall buildings.

In San Francisco, there is a unique concentration of tall buildings that are 240 feet or taller. These tall buildings have advanced and complex characteristics and demands for seismic safety. Their structural systems preclude generic performance assumptions and prescriptive engineering solutions, and they are increasingly being used to house residents.

Based on the Tall Buildings Study and Earthquake Safety Improvement Program, the City should implement mandatory training and guidance to property managers and tenants around the seismic safety of tall buildings, as well as offer assistance to improve the geotechnical and foundational issues in the event of an earthquake. The Department of Building Inspection (DBI) developed guidelines for preparing geotechnical and earthquake ground motion reports for the foundation design and construction of tall buildings. DBI also requires performance-based structural design reviews for buildings above 240 feet tall (and some building types above 160 feet tall), and they convene an engineering design review team of external consultants to review and advise on proposals of new tall buildings.

As tall buildings are increasingly being used for housing purposes, in addition to business purposes, the City should set up data monitoring to track building use and resident demographics in order to address additional vulnerabilities.

POLICY 3.2.6.
Consider hazard information during City decision-making processes about land use, building density, building configurations, and infrastructure.

Land use decisions should be made with hazards in mind. The Planning Commission, the Board of Supervisors, and other City decision makers shall be aware of and consider hazards when making decisions that will affect the types and structures that will exist in the future, including existing and potential structures, land uses and their associated densities, transportation, and other infrastructure.

Changes to the General Plan, Area Plans, and Planning Code should take into consideration the prevalent disasters affecting the City and the effects they may have on the safety of future development. These considerations should balance with other environmental justice and community welfare concerns, ranging from safety to community health to economic security to quality of life.

In order to protect City property, building codes and technical knowledge must be as up to date as possible as new engineering expertise is gained. Keeping abreast of such information and technologies should be a priority for the City.

POLICY 3.2.7.
Monitor emerging industries like bioscience and other lab-based sectors, and ensure that state and local codes manage risks effectively.

The City has made it a goal to encourage the bioscience industry, as well as other lab-based industries, in the City because of its economic development potential. The University of California, San Francisco (UCSF) is a generator of life science and bioscience companies, it and has made the Bay Area a center for the industry. The number of companies located or seeking space in the City is expected to grow.

Many medical research laboratories handle biological materials, which may generate radioactive or otherwise hazardous materials and waste. Because of this, bioscience and biotechnology lab facilities in the City are subject to hazardous materials safety regulation by the federal government, state government, and the San Francisco Department of Public Health. Firms are required to generate Hazardous Materials Business Plans including storage and secondary containment policies; Emergency Response Plans; and training plans to educate staff about handling and disposal. Currently, state and federal regulations are adequate and sufficient to govern bioscience activities. In addition, San Francisco has adopted more stringent threshold reporting requirements for labs resulting in greater local oversight.

Lab-based sectors such as bioscience are likely to evolve, and the functions of the firms located in the City may shift. The City should monitor these industries to ensure safety regulations continue to be applicable. The City should encourage performance-based design and engineering technologies to protect the safety of critical research projects, particularly if facilities are vulnerable to hazards.

Promote Green Building

POLICY 3.2.8.

During retrofits and new construction, prioritize building practices that emit lower greenhouse gasses and build resilience to multiple hazards at once, especially in Environmental Justice Communities.

When retrofitting existing construction and developing new construction, use the latest building practices to emit lower greenhouse gasses and increase resilience to multiple hazards at once. In Environmental Justice Communities, where there are disparities in the prevalence of safe, healthy, and affordable homes, it is especially important to prioritize low-carbon building practices without jeopardizing housing affordability. In addition to the latest building standards, pursue building electrification, urban greening, low-carbon building materials, weatherization, interactions with the public realm, and other green building practices.

POLICY 3.2.9.

Continue to promote green stormwater management techniques.

The City has an abundance of impervious surfaces. Buildings, streets, parking lots, and other paved surfaces prevent the absorption of rainfall, so low-lying areas of the City are particularly susceptible to flooding in heavy rains. In addition, urban stormwater runoff can be highly polluted, and pollutants that go down storm drains can have negative impacts on the sewer and storm system, contributing to system overflows. Natural systems can often be an effective supplement, helping to absorb the overflow and filter out pollutants from that runoff.

Building and site development should include natural systems wherever possible. Natural vegetation, landscaped swales, and gardens included in site designs can reduce, filter, or slow the spread of stormwater runoff. “Green streets” that include pervious concrete, planters, and landscaped strips adjacent to sidewalks can assist the City’s sewer discharge capabilities. Green roofs incorporated into buildings provide another method of absorption. Similarly, sustainable construction techniques can be used to mitigate against the effects of future disasters. Green building technologies now allow for buildings that can provide their own power and filter their own water from runoff. This helps reduce two problems associated with disasters, the need for power and the need for potable water.

The City needs bolstered flood control structures and flood proofing to respond to the anticipated impacts of extreme storms. To prepare, the Public Utilities Commission can continue upgrading the City sewer system, and also critical are more imaginative solutions, like capturing stormwater for irrigation, increasing urban forestry activities, and other green uses.

OBJECTIVE 3.3.

INFRASTRUCTURE AND PUBLIC REALM. **ENSURE THE CITY’S LIFELINE SYSTEMS, TRANSPORTATION AND EMERGENCY RESPONSE FACILITIES, UTILITIES, STREETS, PUBLIC SPACES, AND COASTS CAN WITHSTAND AND ADAPT TO ALL HAZARDS.**

Public Assets and Awareness

POLICY 3.3.1.

Reduce the risk of all hazards to community facilities and lifeline infrastructure, starting with Environmental Justice Communities.

For safety and resilience, community facilities and lifeline infrastructure serve as key assets in emergency management. Many types of community facilities can be areas for refuge and evacuation, storing and distributing disaster supplies, and providing critical services like medical care. Community facilities provide public services, such as public schools, childcare facilities, fire stations, police stations, recreation centers and parks, public and non-profit health facilities, libraries, arts and culture facilities, social welfare facilities, and facilities serving the homeless. In addition to facilities supported by the Community Facilities Element, the City can coordinate with other institutions such as private schools and places of worship. Identify the network of these facilities, assess their vulnerability and consequences to hazards, and create a set of strategies to mitigate harm so that these are available and functional to the community during disaster.

POLICY 3.3.2.

Identify and replace vulnerable infrastructure and critical service lifelines in high-risk areas.

In the event of a disaster, two of the most critical networks will be the City’s water system and its sewer and sanitation lines. Upgrades are already underway: the San Francisco Public Utilities Commission (SFPUC) and Public Works have ongoing programs to replace vulnerable water mains and sewers and to improve performance of the systems during earthquakes—by including system segmentation, safety shut-off systems, and redundant back-up systems or other methods of reducing damage—and providing alternative sources of service. SFPUC is undertaking a Water System Improvement Program to strengthen the Hetch Hetchy water transmission system against earthquake damage. A connecting pipeline is currently under construction to connect the region’s major water supply systems of the Hetch Hetchy, managed by the SFPUC, and the reservoirs in Calaveras, Amador, and Alpine counties managed by the East Bay

Municipal Utility District (EBMUD), which will enable water to be distributed from one Bay Area system to another in the case of failure. However, aging infrastructure in the City's sewer and sanitation system is a concern—beyond ailing pipes, the City's tunnels, pump stations, and treatment plants need upgrades and repairs. The San Francisco Sewer System Master Plan project currently underway at the SFPUC will eventually provide a detailed roadmap for these major improvements and provide a plan for funding these improvements.

Other upgrades underway include Pacific Gas and Electric's seismic program replacing vulnerable gas lines, and Caltrans' bridge and highway retrofit programs. BART is in the midst of a system wide seismic upgrade project; the City should lobby for continued seismic retrofit and disaster-resistance measures on our regional transportation systems such as Caltrans and AC Transit. More upgrades are needed to PG&E's electric system to reduce the risk of service disruption to customers, including transmission improvements, replacement of vulnerable transformers, circuit breakers, and other at-risk components of the electric system. The City should require a specific plan detailing these improvements, and a timeline for their implementation.

POLICY 3.3.3.

Conduct capital planning to advance resilient infrastructure prioritizing life safety and functional recovery, as well as the needs of Environmental Justice Communities and other vulnerable people.

In capital planning, incorporate environmental justice analysis of community facilities and other critical infrastructure that serve, impact, and are more used by Environmental Justice Communities and other vulnerable people. Community facilities provide public services, such as public schools, child-care facilities, fire stations, police stations, recreation centers and parks, public and non-profit health facilities, libraries, arts and culture facilities, social welfare facilities, and facilities serving the homeless. With community outreach and engagement, listen to resident needs and priorities of their built environment and public realm. Explore how public infrastructure projects can limit environmental justice burdens and improve outcomes for active transportation, open space access, and climate resilience.

POLICY 3.3.4.

Where there are ongoing and known plans for future public infrastructure projects, consider prioritizing maintenance of public access and protecting the public rights-of-way above the needs of private property and development.

Public infrastructure projects often depend upon the system of public rights-of-way for accommodation. For this reason, the City should prioritize maintaining and protecting the public rights-of-way, above and below street level, for future public use. The City should refrain from issuing encroachment permits to private development without considering these priorities.

For certain public infrastructure projects to deliver lifeline and other public services, they can be so large and complex that they cross multiple jurisdictional boundaries and rights-of-way between public and private spaces. The City must protect the public-rights-of-way, especially above the needs of private development projects, to have a space to deliver public services. Ensure that private encroachment permits do not interfere with future public infrastructure projects.

POLICY 3.3.5.

Provide training, guidance, and assistance for nearby communities most impacted to potential threats and consequences to public assets and infrastructure within the Sea Level Rise Vulnerability Zone.

In the Sea Level Rise Vulnerability Zone, over six percent of the City's land (about four square miles) could be inundated by temporary or permanent flooding by 2100. This will affect people, jobs, and vital infrastructure in the City. There are public assets and infrastructure like the Muni yard and San Francisco Public Utilities Commission water stations that are at risk. The City should develop training, guidance, and assistance to communities in and adjacent to the vulnerability zone on how these assets may be affected and how their lives may be impacted. These resources should increase the City's understanding of how sea level rise and inundation is a potential threat and consequence to the vulnerable communities; increase communities' understanding of adaptation efforts underway; how to stay involved; increase adaptation capacity; and decrease disruptions in service.

Resilience to Future Hazards

POLICY 3.3.6.

Maintain research, monitoring, and guidance related to earthquakes, sea level rise, and flood hazards to inform a framework for future investments and development.

In San Francisco, earthquakes are the greatest hazard risk to life and property due to the San Andreas and Hayward Faults. Within the next 30 years, the probability of the San Francisco Bay region experiencing an earthquake measuring magnitude 6.7 is 72%. Unlike other hazards, earthquakes strike without warning. Even if the next earthquake was accurately predicted with a week's warning, without advance planning and action, there are tens of thousands of seismically vulnerable buildings throughout the region that would be

severely damaged or collapsed. On the other hand, sea level rise is a slow-moving threat that also demands immediate action. By 2030—without taking any adaptation actions—the City is at risk of sea level rise negatively impacting 5,000+ residents, 10,000+ jobs, 200+ acres of open space, and other communities, buildings, and assets.

The City needs to learn more about the evolving science of earthquakes, sea level rise, and flood hazards, monitor the impacts and potential threats to the people and assets of the City, and guide adaptation and response activities to these hazards. It is especially important to understand the interactions of these hazards, and with other hazards like biological hazards (e.g., hazardous materials), to inform effective investment and development of strategies for resilience.

POLICY 3.3.7.
Support the development and updates to building, planning, and other municipal code requirements that meet City climate and seismic resilience performance goals.

The design and construction methods used in buildings are critical to community safety and resilience. At regular intervals, use best practices to review and amend all relevant public codes to incorporate the most current knowledge of structural engineering regarding seismic risks; design and site new buildings considering flood and sea level rise elevations; and green building practices relative to best biologic and ecosystem processes.

Among U.S. cities in areas of very high seismic hazard, the City is unique because of its geography, urbanization, and reliance on public transportation. Current seismic codes ensure that new buildings are earthquake- and fire-resilient, and protect people inside buildings by preventing collapse and allowing for safe evacuation. However, current code requirements do not necessarily limit damage to a structure, or ensure its function post-earthquake. Damage to new buildings and developments can have magnified impacts that affect adjacent structures and the City's lifelines.

A number of factors support the idea that new and retrofitted buildings in the City should be built for better seismic performance than the default level provided by the current Building Code. Consider creating tiered, "enhanced" levels of seismic performance that are performance-based by offering incentives such as priority processing (similar to a LEED certification for sustainable design).

There are additional nature-based solutions that support the built environment's contribution to enhanced natural ecosystem function. Consider higher floor elevations, softscape and natural buffers, and other flood proofing approaches within the Sea Level Rise Vulnerability Zone. Use the latest climate resilient expectations in the Building Code.

POLICY 3.3.8.
For new construction and public assets, consider resilience measures against future climate projections and other hazards, beyond current life safety expectations in building codes.

Many hazards, such as sea level rise and extreme heat, are occurring more frequently and intensely. The research shows nonlinear projections of how these hazards occur and impact the City. While building codes prioritize life safety and seek the latest best practices, the Safety & Resilience Element encourages resilience measures in new construction and public assets to act aggressively against all hazards and their future climate projections. As the climate crisis worsens, it is beneficial to act out of an abundance of caution to protect the safety and increase resilience of people and assets. The City encourages utilizing resilience measures that may not be reflected in building codes yet or may not yet have been applied.

POLICY 3.3.9.
Design and utilize open spaces considering their use as emergency gathering areas, floodable spaces, and ecosystem services, per the Recreation and Open Space Element.

For certain hazards, such as earthquakes, flooding, pandemic, and extreme heat, open spaces in the public realm can serve as critical spaces for emergency gathering (evacuation, shelter) and buffers (retreat). Per the Recreation and Open Space Element, design and utilize open spaces to act as emergency gathering areas that are low-risk, flexible use, and resilient. Additionally, these open spaces along and near the ocean and bay shorelines can serve as floodable spaces as part of nature-based solutions to sea level rise and flood hazards.

POLICY 3.3.10.
Identify and maintain emergency access areas and potential evacuation routes to support capacity for future emergencies and evacuations.

During certain disasters, the City must maintain an essential transportation network to facilitate disaster response and safety. Public Works maintains an Emergency Priority Route Map which is integrated into the Department of Emergency Management's Emergency Response Plan. The map identifies a priority route network for City agencies to conduct damage assessment and maintain critical facilities and services post-disaster, such as a major earthquake.

For evacuation needs, the City must also maintain the safety and function of streets and roads to activate as evacuation routes and emergency access areas at any time. These transportation corridors will need to support an influx of users and maintain structural integrity and function during a large earthquake or other disaster. As part of identifying potential evacuation routes, the City must identify accessibility needs of people with limited mobility options and other vulnerable people, such as people with disability, access, and other functional needs.

Where known, consult with relevant authorities governing major transportation corridors and access areas to ensure all levels of government are aware of the current and future capacity expectations for safe evacuation. These activities should include sub-surface, ground, air, and water transportation routes.

OBJECTIVE 3.4.

SPECIFIC HAZARDS. IDENTIFY AND PURSUE PROGRAMS AND PROJECTS THAT MITIGATE AND SAFEGUARD AGAINST MULTIPLE HAZARDS ACROSS MULTIPLE ASSETS, ESPECIALLY FOR ENVIRONMENTAL JUSTICE COMMUNITIES AND OTHER VULNERABLE PEOPLE.

POLICY 3.4.1.
Assess, mitigate, and provide holistic information about all hazards affecting the City, as identified in the Hazards and Climate Resilience Plan.

The City should advance research and understanding of all hazards and their impact to the people and assets of San Francisco. The Hazards and Climate Resilience Plan (HCR) serves as the City's Local Hazard Mitigation Plan (LHMP). The City should work with the academic community, appropriate government agencies, and other stakeholders to assess the threat and impact of the 13 main hazards to the City. Coordinate this basic research with the appropriate data clearinghouses in the City that relate to achieving racial and social equity, public awareness, and informing decisions around capital planning and development.

These hazards include geologic hazards (earthquake, tsunami, landslide, and dam or reservoir failure), weather-related hazards (flooding, high wind, extreme heat, and drought), fire-related hazards (large urban fire, wildfire, and poor air quality), and biologic and toxic hazards (pandemic and hazardous materials).These hazards can include the latest emerging hazards that may not be reflected in the Hazards and Climate Resilience Plan, such as sea level rise and noise pollution.

POLICY 3.4.2.
Protect against the risks of using, storing, and transporting hazardous materials and increase public awareness, particularly in areas prone to seismic and flooding risks.

The City should coordinate with the appropriate regulatory and monitoring agencies for the use, storage, and transportation of hazardous materials. The location of hazardous materials, existing and potential, should be in areas resilient to seismic and flooding hazards to minimize the spread as an environmental pollutant and threat to public health. Where hazardous materials are close to people, and critical assets like the water table, the public should be notified and empowered to seek more information and resources to protect health and safety.

POLICY 3.4.3.
Educate the public about hazardous materials procedures, including transport, storage, and disposal.

Hazardous materials include chemical, biological, radiological, nuclear, and explosive substances (CBRNE). Accidents such as toxic releases from facilities and vehicles, fires and explosions caused by chemical releases, and oil spills in the bay are not uncommon. There is also increasing awareness and research about the mobility of hazardous materials during inundation and flood hazards, particularly towards the groundwater table. The Federal Emergency Management Agency (FEMA) has estimated that an average of 60,000 accidents and over 200 deaths involving chemicals occur in this country every year. The City should support research about the interaction of toxic substances with groundwater threats.

Several of the City's agencies provide businesses and residents with information about safe disposal of hazardous materials, primarily the Fire Department and Department of Public Health. The City's Fire Department is responsible for administering local safety regulations for business operating with hazardous materials, and it is the first responder to chemical and hazardous spill accidents. The Fire Department is also the point of contact for risk/hazard assessments, capability assessments, and detailed response planning. The Department of Public Health enforces state and City environmental health laws, including hazardous materials storage; issues hazardous materials use permits; and investigates illicit discharge and disposal of hazardous materials.

For common CBRNE hazards at the household-level, the Neighborhood Emergency Response Team (NERT) educates the community about their indicators and safe disposal methods. The Public Utilities Commission also provides residents and businesses with information (through ads and website resources) on how to properly dispose of hazardous materials including waste oils, such as motor oil.

POLICY 3.4.4.

Develop a plan for supporting Environmental Justice Communities and other vulnerable people during Sheltering-in-Place activities, to protect from poor and hazardous air quality, pandemic, and other hazards.

During a disaster, sheltering in place may be necessary to social distance, prevent the spread of disease, protect from threats to health and safety, and support public health. Sheltering In Place requires safe, healthy, and affordable housing be available to all. It limits the ability for people to conduct their routine behaviors for living and working, such as grocery shopping, going to work, and going outdoors for physical and mental health. The City should develop a plan for supporting Environmental Justice Communities and other vulnerable people during shelter in place, including assessing information and resource needs, culturally competent communication, outreach of public services, and disaster supplies.

POLICY 3.4.5.

Prepare for efficient and equitable responses to medical emergencies and pandemics.

On January 21, 2020, the City activated its Emergency Operations Center to support the response to COVID-19 and coordinate with active Department Operations Centers. Mayor Breed's early decision to proclaim a local emergency was instrumental to San Francisco's ultimate success responding to the pandemic, allowing City agencies to enact emergency procedures that helped save lives. As of December 2021, the City continued to have the lowest cumulative per capita COVID-19 mortality rate among other large jurisdictions.

The COVID-19 Pandemic Response After Action Report outlined the strengths of the City's response and suggested further updates to enhance the City's emergency response plan. In addition to early and rapid action, the City's successful response can be attributed to the unified priorities, pooled resources, and clear communications that came from the coordinated COVID Command Center, as well as the flexibility and capacity provided by the Disaster Service Workers. Specifically, improvements should focus on increasing racial and social equity in the community, improving the City's Disaster Service Worker program, and providing further clarity and streamlining to both the organization of response services and procurement of disaster supplies.

For all future pandemics and other medical emergencies, the City should create an advance plan to prepare for a similarly successful early and rapid response. This plan should include the disease testing and response capacity of hospitals; disaster supply needs at the household, neighborhood, and citywide level; community health capacity of community facilities; and accessibility capacity of public information. The City should ensure the public is kept well informed about evolving information regarding the public health emergency. The City should ensure systems are in place to ensure continuity of public services, such as public transportation and utilities service with staff absences. The City should solidify plans to ensure access to a stockpile of emergency services to use and distribute, such as medicine and protective equipment.

POLICY 3.4.6.

Assess and mitigate the risk of flooding by incorporating the Flood Insurance Rate Map for San Francisco and related programs.

The National Flood Insurance Program (NFIP), managed by the Federal Emergency Management Agency (FEMA), provides low-cost flood insurance for communities that adopt floodplain management programs to help mitigate flood losses and damages. FEMA uses the Flood Insurance Rate Map (FIRM) to identify areas with 1% annual chance of flooding, and it uses this as the basis for insurance rating.

FEMA approved the City's application for participation in the NFIP in April 2010, and subsequently, the City has amended the 2008 Floodplain Management Ordinance in order to meet NFIP requirements. The established flood damage reduction program provides homeowners and other property owners the opportunity to purchase federally-subsidized flood insurance at affordable rates. FEMA issued a preliminary FIRM for San Francisco in 2007. The final map and ordinance was adopted in 2020.

The Floodplain Management Ordinance requires the first floor of structures in flood zones to be constructed above the floodplain or to be flood-proofed with variances for exceptional circumstances. The map, as proposed, would designate portions of waterfront piers, Mission Bay, Bayview Hunters Point, Hunters Point Shipyard, Candlestick Point, and Treasure Island in coastal flood hazard zones, which may have implications for development plans and insurance requirements in those areas.

To mitigate against potential risks, the City should maintain NFIP participation and use the information provided by FEMA to engage in additional floodplain improvements to at-risk areas. The City should continue to implement ordinance requirements for new construction, address flood hazards in wastewater projects, and pursue ordinance requirements for substantial improvements projects located in Special Flood Hazard Areas.

POLICY 3.4.7.

Support retrofitting measures for historic buildings vulnerable to current or future flooding, while respecting architectural and historic character, consistent with pertinent local or federal design guidelines.

Consistent with design guidelines at the local and federal levels, address the unique retrofitting measures required for historic buildings that are vulnerable to sea level rise and flood hazards. The U.S. Secretary of the Interior issued flood mitigation design guidelines for historic properties, and the City can explore additional design guidelines that respect the architectural and historic character that is vulnerable to damage.

Goal 4. Emergency Preparedness

Ensure San Francisco's residents, workers, and visitors have the knowledge, capacity, and government support needed to be safe in the face of disasters. The City must be prepared to respond quickly and effectively in the case of a disaster. In order to meet the needs of its people and assets after a disaster, response, recovery, and reconstruction plans must be prepared in advance to the extent possible. The City must have the coordination necessary to execute them rapidly. In addition to readying its own agencies and departments, the City must ensure all people are aware and prepared for the possibility of disaster. State and local emergency responders advise people to be prepared for a minimum of 72 hours of self-sufficiency after a large earthquake. Achieving preparedness is even more critical for vulnerable populations and those in geographic areas and building types that are more vulnerable to earthquake damage.

OBJECTIVE 4.1.

AWARENESS AND CAPACITY BUILDING. INCREASE THE UNDERSTANDING AND TRAINING OF EQUITABLE EMERGENCY PREPAREDNESS TO ALL HAZARDS AMONG ALL GOVERNMENT, PRIVATE, AND PUBLIC SECTORS.

POLICY 4.1.1.
Provide ongoing emergency preparedness and response training to all City employees and other responding agencies.

Under state law, all public employees are designated Disaster Service Workers. At any time during an emergency that results in conditions of disaster or in extreme peril to life, property, and resources, City employees could be assigned to any disaster service activity that promotes the protection of public health and safety. The Department of Human Resources (DHR) manages the City's Disaster Service Worker Program, which includes mandatory training for all City employees. The Department of Emergency Management (DEM) is responsible for ensuring that City employees are trained to perform as needed under the City's emergency plans.

The City should also continue to hold multi-agency drills on a regular basis to test and refine emergency plans. During the COVID-19 pandemic, the Disaster Service Worker Program was a vital source of staffing for the Emergency Operations Center and for responding to community needs. DHR, in consultation with DEM and other City agencies, should continue to refine the Disaster Service Worker program so that is deployed equitably continues to be used effectively to bring response activities to the community.

POLICY 4.1.2.
Promote greater public awareness of disaster risks, personal and business risk reduction, and personal and neighborhood emergency response.

People and organizations that are well informed about possible disasters can take effective private measures to reduce their vulnerability to risks. They can also increase their effectiveness in responding to a disaster and helping others when public agencies are overwhelmed. Several of the City's agencies, including the Department of Emergency Management, the Fire Department, the Police Department, Public Works, and the Department of Building Inspection, provide information to the public on what to do in a disaster. As an example, the Fire Department administers the Neighborhood Emergency Response Team (NERT) to deliver on these goals. The Department of Building Inspection maintains a list of earthquake information and emergency power shut down information at its public reception and on its website.

However, information access can be increased beyond these sources, especially to reach populations who may be less familiar with the City system and are less frequent visitors to City buildings. Materials should be placed in everyday materials such as newspapers; alternative venues such as social clubs, community facilities, or service agencies; and distributed via mobile sources at gatherings such as fairs and festivals. Information should be available in large print and on audio cassette for the visually impaired, as well as in a variety of non-English languages.

POLICY 4.1.3.
Create a consolidated website linking all the City's disaster-related information for the public and ensure distribution of the information through offline outreach that is accessible and equitable to all people.

Just as the responsibilities for disaster planning programs is distributed among many agencies and departments within the City, the related information about those programs and operations is dispersed. Much information is housed within the agencies responsible, and it can be difficult for the layperson to access all the information that exists.

The City should utilize technology to redress this issue—a simple solution would be to bring together all the varied information that exists into one website. This site should contain links to hazard maps of geologic hazards and soil conditions; to the City's adopted emergency response plans and other related plans and documents; to programs such as Building Occupancy Resumption Program (BORP) and Neighborhood Emergency Response Team (NERT); to programs for property owners, incentives, and other action items; and to information about emergency services and locations. It should map relevant public information such as drinking areas, evacuation routes, emergency transport pick-up locations and locations of Public Information Centers to be set up in an emergency.

This consolidated website should be accessible to equitably reach all people, through availability on both web and mobile platforms, translation into many non-English languages, and accessible to screen readers.

POLICY 4.1.4.
For pandemic preparedness, develop a framework of healthcare management that combines the City's physical assets with social and management tools to better respond to public health emergencies.

The COVID-19 pandemic transformed society overnight. It rapidly altered how people interacted with one other and the built environment, as society wrestled with how to apply public health principles to stop the spread of the virus and prevent further loss of life. Building on these lessons from COVID-19, as well as other infectious diseases, the City should develop a comprehensive framework of healthcare management that includes physical and intangible resources to maximize public health outcomes. For physical assets, there are medical institutions, public infrastructure, and land use patterns. For intangible resources, there is social cohesion (strength of relationships and sense of solidarity among community members), trust in government, and socio-cultural factors. These two groups of assets can be managed holistically to manage the transmission and control of infectious disease and maximize public health outcomes.

OBJECTIVE 4.2.

CITY AGENCY CAPABILITIES. PLAN FOR THE OPERATIONAL, DATA, AND LOGISTICAL CAPACITIES NEEDED TO FACILITATE COMMUNITY SAFETY DURING THE RESPONSE, RECOVERY, AND RECONSTRUCTION PHASES OF ALL HAZARDS.

Water and Energy

POLICY 4.2.1.
Ensure potable water is available in an emergency.

The San Francisco Public Utilities Commission (SFPUC) has various strategies for supplying and/or distributing alternative water supplies during an emergency. Emergency disinfection may be necessary. The California Department of Public Health has issued guidelines for the use of alternate water sources and the issuance of Unsafe Water Alerts and Boil Water Orders. Usage of alternative water supplies will require coordination with appropriate agencies, such as San Francisco Department of Public Health, California Department of Public Health, San Francisco Fire Department, and others.

At the supply and source level, SFPUC has redundancy of sources under the operational responsibilities of Water Enterprise and Operating Divisions. These include Upcountry reservoirs, East Bay reservoirs, Peninsula reservoirs, and local groundwater. At the treatment level, SFPUC has plans and procedures for responding to treatment issues and disruptions. At the distribution level, SFPUC maintains a range of equipment and procedures for alternate delivery. Equipment includes water trailers, portable disinfection units, and 40 hydrant distribution manifolds. Manifolds, water trailers, and other equipment is stored at either CDD Corporation Yard or storage facility at University Mound. Bottled water is identified as a needed alternate water strategy, and supplies and distribution points would be coordinated and acquired at the City Emergency Operations Center level, through citywide logistics.

The SFPUC has installed 6 groundwater wells on the westside of San Francisco. The groundwater wells currently pump less than 1 million gallons per day (mgd) and is expected to increase to 4 mgd by 2030. Additionally, SFPUC is studying the opportunity to produce and serve purified water in San Francisco.

POLICY 4.2.2.
Ensure renewable energy sources are available for redundant energy in the event of an emergency.

More frequently, the threat of Public Safety Power Shutoffs (PSPS) is affecting San Francisco. The increased frequency of wildfires occurring at the regional and state levels pressure PG&E to turn off power lines during high winds or dry conditions. Fortunately, San Francisco is less likely to experience a PSPS compared to other jurisdictions due to the lower likelihood of wind-induced fire events with

the City and its location on the transmission grid. However, the disruption in energy service is an inconvenience and threat to wellbeing that should be addressed through resilience of the energy grid.

There are many people who rely on continuous, affordable energy for their health and safety, such as storing life-saving medication and motorized wheelchairs. There are also public assets and infrastructure that relies on energy for safety and function, such as broadband internet and traffic lights. PSPS events occur due to a number of potential hazards, such as high winds, drought, and wildfire. The City should pursue strategies for redundant energy sources and use in the event of an emergency, and seek renewable sources of energy that do not contribute to the climate crisis. The City should continue to work with relevant government agencies, the private sector, and other stakeholders to assess capacity to generate, store, and distribute renewable energy for essential lifeline and recovery activities.

POLICY 4.2.3.
Continue to expand the City's fire department prevention and firefighting capability with sufficient personnel and training.

The City faces risk from fires associated with earthquakes. A great number of structures were lost in the 1906 earthquake, not due to the ground shaking itself, but because of the spread of fires that were difficult to battle in the aftermath of the quake. Fires continue to be a great threat, particularly in densely developed areas.

The supplemental water supply systems have been extended and strengthened since the Loma Prieta earthquake, including the Auxiliary Water Supply System, the Portable Water Supply System, cisterns, Bay water suction devices, and fire boats. Staffing and equipment needs of the Fire Department must be foreseen in advance and met. The City needs to improve water supply systems to cover those neighborhoods not served by the Auxiliary Water Supply.

The Fire Department should consider expanding the scope and training of Neighborhood Emergency Response Training (NERT) to include fire suppression, fire reporting, and other neighborhood recovery assistance, and consider coordination with neighborhood-level disaster planning.

Disaster Response

POLICY 4.2.4.
Ensure the City's designated system of emergency access routes is coordinated with regional activities for both emergency operations and evacuation.

After a large earthquake or other disaster, it is likely that many streets will be impassable. This will make firefighting and other emergency response actions more difficult, hinder the movement of people, and interfere with debris removal and other short-term recovery activities. In order to support post-disaster transportation movement, Public Works has developed priority routes for opening during an emergency or disaster. These routes include routes which connect fire and police stations, hospitals, and other critical facilities; routes to emergency drinking water distribution sites and City shelters; and routes to staging areas for disaster service work around the City. These routes enable the necessary clearance width for emergency vehicles and support trucks, and they have been prioritized for debris clearance immediately following a disaster.

The City should ensure that the regional sequence of clearance activities is coordinated to connect with these priority routes, and that the route openings are well-timed to sync with the opening of bridges and regional highways. This coordination can be directed using information from the Transportation Management Center (TMC) staffed by Caltrans, California Highway Patrol, and MTC, specifically its Emergency Operations Center (EOC) which was created for procedural disaster management. In addition, the Regional Emergency Operations Center (REOC) Transportation Branch will distribute a transportation service plan which shall include information related to regional evacuation and route openings. For Caltrans District 4, the EOC is activated to serve as the central location to manage and coordinate responses to major incidents/disasters affecting State transportation facilities.

POLICY 4.2.5.
Utilize the City's and region's transit network to facilitate response and recovery during and after a disaster.

The transit network—bus, rail, freight rail, transit, ferry, and air—will be a critical component of response during a disaster. As dependence on cars will not work well in a state of emergency, the transit network will be a critical component of response during a disaster. The City's vehicular network is limited by bridges and freeways with little redundancy; damage caused by the event to roadway networks, security considerations, and traffic control may require the restriction of private automobile use for months after the event. As of 2022, one in five residents in San Francisco does not have access to a personal vehicle and will require public transportation to access essential services. The transit network provides safe and efficient use of resources and is capable of moving significant numbers of people and equipment with relatively few resources. The San Francisco Municipal Transportation Agency has emergency reserves of fuel and is able to continue operations even when the region faces significant disruption.

Transit may be used in emergency situations to move emergency workers and deliver equipment to sites. Evacuation plans should incorporate public transportation to efficiently evacuate people quickly and efficiently without snarling roadways and impeding emergency operations.

Immediately following a disaster, the City should utilize its transit network to restore mobility—to help bring evacuees back to their neighborhoods, to move daily workers to jobs, and to resume day-to-day life. Coordinated transit services can be used to provide long-range links across counties. Additional temporary transportation improvements such as limited stop buses, bus-only lanes, and the addition of high-occupancy vehicle lanes may help relieve overtaxed freeway segments. The clear conveyance of route information and service maps, such as real-time road safety conditions and available public transit options, can help connect riders to services.

The Bay Area region, under the leadership of a task force that includes the CalOES, Caltrans, the Metropolitan Transportation Commission (MTC) and Bay Area transportation agencies, has developed a Trans Response Plan (TRP). The TRP sets out a framework for a coordinated, multi-modal, and timely response by Bay Area transportation providers to a major earthquake or other significant emergency in the region. The resulting procedures are tested on an annual basis through tabletop or functional exercises. The procedures have also been integrated into individual operator emergency plans so that the regional response can be automatically invoked, if needed.

The City, in cooperation with MTC, also has plans that address immediate emergency transportation needs, and the day-to-day transportation routes that will need to be reinstated in order for the region's activities to resume. The Transportation Coordination and Recovery Plan (TCRP) focuses on emergency transportation, evacuations, and the movement of emergency workers. The Regional Transportation Emergency Management Plan (RTEMP) addresses how agencies will coordinate with each other to assist with the movement needs of the public following a major disaster. Together, the two plans are expected to result in a single, unified program to direct the region's transportation resources.

OBJECTIVE 4.3.

CITYWIDE COOPERATION. **CREATE PROACTIVE PLANS AND PROGRAMS TO PREPARE READINESS AND COORDINATION FOR ALL DISASTERS.**

Emergency Management

POLICY 4.3.1.
Bolster the Department of Emergency Management's role as the City's provider of emergency planning and communication, and prioritize its actions to meet the needs of San Francisco.

The Department of Emergency Management (DEM) has responsibility for developing the City's Emergency Response Plan, annexes, and other emergency plan elements; supporting the coordination of the response and recovery agencies; providing emergency training opportunities; conducting and advising on functional and discussion-based exercises, coordinating activities with regional, State and federal agencies; and maintaining the Emergency Operations Center. This agency must be maintained at an appropriate level, with sufficient personnel and resources to carry out these tasks.

The agency also manages Homeland Security Grants disbursed by the federal government. In recent years, the City has been the recipient of a significant amount of homeland security funds, most of which were targeted for urban centers. In the future, DEM should work with the state to improve its homeland security spending, to ensure that grant money can be effectively utilized and will not revert back to the federal government.

POLICY 4.3.2.
Support the Emergency Operations Center and continue maintenance of alternative operations centers in the case of an emergency.

The City's Emergency Operations Center (EOC) is designed to serve as a secure well-equipped location for centralized communications and direction. This center houses the Department of Emergency Management, including its Division of Emergency Communication, and consolidates 911 calls and Fire, Police, and Medical Dispatch. It is managed by the Department of Emergency Management.

However, emergency centers may be destroyed or rendered inaccessible in a major catastrophe. The City should prepare for this possibility in advance, by ensuring duplication of information and systems in multiple locations, by identifying alternative sites for temporary EOCs, and by establishing a mobile command center with the necessary technology and information infrastructure for flexible operations.

POLICY 4.3.3.
Ensure all response plans are coordinated with the Disaster Council.

The San Francisco Disaster Council is the City's central body for emergency planning, and it has been accredited by the California Emergency Council. The Disaster Council is codified by the San Francisco Administrative Code, Chapter 7. The Disaster Council is chaired by the Mayor and composed of the Director of Emergency Services, key department heads and City officials, three members of the Board of Supervisors, and representatives of private organizations having official emergency responsibilities. The Council reviews the efforts of the Emergency Response Planning Task Force and recommends emergency actions such as mutual aid plans and for adoption by the Board of Supervisors.

In order to coordinate the actions of the various agencies throughout the City, the Disaster Council should serve as a central repository for all hazard mitigation, preparedness, and response and recovery activities. The Disaster Council, through its contact with the State Emergency Council and the several local disaster councils within this metropolitan area, can ensure that the work of the City is coordinated with those of the surrounding region. All actions recommended by the Safety & Resilience Element, and developed in other efforts or documents, should be brought forth to the Disaster Council for their review and approval.

POLICY 4.3.4.
Maintain and implement a comprehensive, current Emergency Response Plan with neighborhood-level detail on equitable implementation to guide the response to disasters.

The Emergency Response Plan (ERP) ensures that the roles of City agencies and others are well defined, in compliance with applicable state and federal regulations. The ERP utilizes an all-hazards approach to emergency planning and encompasses all natural and human-made hazards applicable to the City. Specifically, the ERP identifies and describes City interactions with regional, state, and federal entities; the role of the San Francisco Emergency Operations Center (EOC); and the coordination that occurs between the EOC and City agencies. The ERP should include the responsibilities of Equity Officers and neighborhood-level planning to ensure equitable outreach. There should be periodic functional and discussion-based exercises of the ERP to test plans and identify gaps in emergency management practices.

POLICY 4.3.5.
Maintain and implement the San Francisco Disaster Debris Management Plan.

The City's Emergency Response Plan includes a response strategy, identifying post-disaster debris management as a key function. The Post Disaster Debris Management Plan establishes a strategy for removal and disposal of disaster debris. Designating appropriate temporary and permanent disposal sites as part of this plan is critical for long-term land use planning.

Post-disaster, the Plan aims to incorporate existing waste ordinances, diverting as much waste as possible from landfills though reuse and recycling. All vegetative debris should be composted; metals should be recycled; other wastes should be separated and reused or recycled wherever possible. Disaster recycling programs seeks to follow the City's recycling program already in place, so as not to require new permits or other legal permission to be developed. The City should develop clear guidelines to direct businesses and residents as they deal with their own debris and trash removal after the disaster.

Communications

POLICY 4.3.6.
Utilize advance technology to enhance communication capabilities in preparation for all phases of a disaster, particularly in the high-contact period immediately following a disaster.

Reducing the impacts of natural and technological hazards requires extraordinary cooperation and coordination among City agencies, and between departments and other governments and non-government agencies. During the immediate response period, the City will need to determine the extent and location of damage, marshal resources for response, provide information to the public, and provide critically needed services to the affected populations. The Division of Emergency Communications of the Department of Emergency Management maintains responsibility for coordinating communication among emergency responders, private partners, and people in San Francisco to ensure an effective and successful emergency operations system.

The City currently uses technologies such as geographic information systems and global positioning to allow wide access to everyday information, and is extending these networks to enhance disaster communication. The City has developed an emergency text-message alerting system, AlertSF, which delivers disaster notifications to registered users, and allows users to access neighborhood specific information. It has reestablished the World War II-era sirens to provide alerts, and it is further upgrading the system to broadcast voice instructions for responding to an emergency. There is the 311 City phone service, where callers will get assistance from an agent 24 hours a day, 7 days a week, and will provide real-time instructions during an actual emergency.

Continuing advances in technology and information systems will enable information to be more widely, quickly, and reliably. Under the direction of CalOES, the City should keep abreast of these advances and utilize them to bolster the existing local information network. The Department of Technology and Office of Economic and Workforce Development should explore opportunities to use technology to

keep all people informed during an emergency, using the full potential of rapid, online, and offline communications mediums. The City should ensure redundant networks exist to communicate at all levels, to internal staff and emergency response personnel, to convey public information, to ensure communication with special needs populations such as the hearing impaired or non-English speakers.

The City should explore work to improve inter-departmental communications during a disaster. The City's police, fire and most other agencies are on the same radio system, but other agencies such as the City's Municipal Railway and the California Highway Patrol use separate systems. The City should work internally to coordinate the radio frequencies used for its various agencies to aid smoother communications during a disaster. The public safety agencies throughout the Bay Area use a varied network of radio frequencies and equipment, making direct intercommunication difficult. The City should also coordinate with other municipalities to coordinate frequencies across the Bay Area, perhaps using a model similar to that used by the San Diego area, where a regional radio communications network links all of the areas public safety agencies.

POLICY 4.3.7.
Enhance communications with other jurisdictions.

Local Emergency Planning Committees (LEPCs) are regional entities set up to enhance coordination among adjacent municipalities. LEPCs are comprised of representatives from local government, the fire service, law enforcement, the local community, and industry; and they are intended to facilitate the coordination and flow of mutual aid. CalOES Coastal Regional Branch-Mutual Aid Region 2 is the LEPC for the San Francisco Bay Area and nearby counties.

The City is acting as the lead agency to develop a Regional Emergency Coordination Plan (RECP) to help the Coastal Region CalOES address gaps in regional emergency plans. The plan will detail how the communities which make up the LEPC will work together on evacuation, housing and transportation of displaced people. It also will outline how medical professionals will interact and how to cope with threats to the water supply, among other issues. Once complete, the City should utilize this plan as a basis for emergency operations issues that transcend City boundaries, such as emergency transportation, evacuation, and the movement of emergency workers.

Public Safety

POLICY 4.3.8.
Plan to address safety and violence issues that may arise post-disaster, and balance these issues with the other demands that will be placed on public safety personnel as emergency response providers.

Violence in the community, including looting and rioting, can occur in the aftermath of disaster. Desperate situations, such as being without food or being stranded with no expectation of rescue, can lead to despair and risky personal actions. Experts state that perceptions of widespread community violence are often based on misinformation, citing human tendency to misread crowds as more malevolent than they really are.

The Centers for Disease Control recommends that efforts to prevent violence after a natural disaster should focus on supporting the physical and emotional needs of individuals and families as well as restoring community-based services. De-escalation training should be provided to all City employees and volunteer emergency responders. San Francisco recently started a program called, Street Crisis Team, that sends Fire and Health teams to respond to behavioral issues, instead of police. Similar programs should be pursued to prioritize the deployment of police officers for interventions where they are most needed.

During a disaster, police will be needed for public safety including activities such as search-and-rescue activities, directing traffic, or dealing with other emergency duties. Police response must be coordinated so that it can respond to both social and physical needs in the face of disaster. Law enforcement agencies, including the San Francisco Police Department and the Sheriff's Department, District Attorney's Office, agency forces such as San Francisco Municipal Railway Police Department, and institutional agencies such as the San Francisco Community College District Police Department, should work to ensure better organization among agencies, so that their magnitude can be leveraged towards the many services that will be required. The City should also maintain relationships with state and federal level peacekeepers that may be needed in an emergency, such as the Coast Guard and National Guard. Finally, security forces should establish communication with Disaster Service Workers to mobilize civilians if necessary to support their efforts.

Partnerships

POLICY 4.3.9.
Develop and maintain mutual aid agreements with local, regional, and state governments as well as other relevant agencies.

Many state and local governments and private nonprofit organizations enter into mutual aid agreements to provide emergency assistance to each other in the event of disasters or other crises. The California Master Mutual Aid Agreement has been adopted by the City, as well as most cities and counties in the state. This agreement creates a formal structure for giving and receiving assistance in emergency situations. The City should expand its network of mutual aid beyond local governments to include relevant agencies such as transit providers, utilities, volunteer agencies and professional organizations for groups like health workers and emergency managers. Numerous agencies and businesses may have resources—facilities, trained staff, transportation or equipment—that can be valuable in emergencies. The City should pursue Memorandums of Understanding or other contracts with any local agencies or businesses that can be identified as resources, including the Unified School District. Discipline-specific mutual aid agreements, such as those for public works, engineering, or public information, may also be useful.

POLICY 4.3.10.
Continue coordination with water transit agencies, ferries, and private boat operators to facilitate water transportation as emergency transport.

Water transit can provide vital transportation support in response to a natural or human-made disaster. Following the 1989 Loma Prieta Earthquake, ferries were heralded for providing much-needed commute service and moving goods. Commercial boats can supplement the role of ferries in evacuating people and provide transit to emergency personnel and equipment in reaching disaster sites.

Vessels must be quickly deployed where most needed, and the response needs to be coordinated with land transit providers to get evacuees to/from the shoreline. The Trans Response Plan (TRP) includes a Regional Maritime Contingency Plan, which aims to establish this coordination through its guidelines and procedures for utilizing the Bay's waters in the recovery phase of a major disaster.

The Water Emergency Transit Authority (WETA) manages the Emergency Water Transportation System Management Plan which lays out emergency response and communication procedures in the case of an emergency. WETA also has plans to add seven new routes through its Ferry Implementation and Operations Plan, and will add a number of new boats and terminals. The increase in capacity gained by these new improvements would allow the Bay Area's ferries to carry over 20,000 trips per hour during a response to disaster, which is almost the evacuation capacity provided during the Loma Prieta earthquake by ferries. The City should support these plans and should ensure coordination is in place. While existing public transportation ferry services within the Bay Area are being transitioned to WETA management and ownership, the City should coordinate with private operators not yet transitioned to WETA, with the aim of establishing emergency aid agreements for the boats as well as the operators in the case of need.

POLICY 4.3.11.
Ensure the City's plan for medical response is coordinated with its privately-owned hospitals.

The Department of Public Health is the City's lead health response agency in the event of a hazard that leads to a major health emergency. They should continue efforts to coordinate with Bay Area private hospitals, community-based clinics, and community-based organizations in the Bay Area.

POLICY 4.3.12.
Develop agreements with private facilities to ensure immediate supply needs can be met.

Supplies that may be critical and in short supply after a disaster include food, water, medical supplies. Hospitals and service providers may also have difficulty in obtaining replacement equipment and medication. The City should coordinate agreements with private facilities such as hospitals, private schools, and warehouses to ensure that reasonable quantities of these necessities can be made available to the City and its people in case of a disaster. The City should also maintain its up-to-date list of rental agreements, for use of temporary supplies and facilities should they be necessary.

POLICY 4.3.13.
Develop partnerships with private businesses, public service organizations and local nonprofits to meet disaster-time needs.

The City should seek opportunities to partner with private sector businesses and organizations where possible. For example, drug stores can be used to distribute medical supplies and pharmaceuticals during emergencies. Medical institutions and university health centers can be set up to provide medical treatment such as inoculations in the event of a chemical or biological emergency.

Private and community-based organizations can assist with recovery activities, and in the dissemination of disaster information. The American Red Cross, Habitat for Humanity, Salvation Army, as well as numerous local groups, can be supportive partners in providing emergency shelter, food, clothing, and physical and mental health support. The City's relationships with these agencies and organizations should be mutually supportive. Local services, particularly in lower-income areas, such as food banks, senior centers, childcare centers, may be ill-prepared to cope with disaster. The City should assist in developing support networks for these organizations, providing them with employee response training, assisting them in securing insurance coverage and helping to develop contingency plans for their continued operations post-disaster.

OBJECTIVE 4.4.

GOVERNANCE AND COLLABORATION. INCREASE THE CITY'S COLLECTIVE CAPACITY TO IMPROVE SAFETY AND RESILIENCE OUTCOMES THROUGH EFFECTIVE COLLABORATION AMONG PEER AGENCIES, THE PRIVATE SECTOR, AND THE PUBLIC SECTOR.

POLICY 4.4.1.
Develop centralized strategies for City safety and resilience functions that hold individual agencies accountable for their roles in disaster planning, coordination, decision-making, funding, cost-sharing, implementation, and risk allocation.

The City must be prepared to deliver life safety and functional recovery services at all times. Beyond basic life-safety functions, critical government programs need to continue in the aftermath of disaster. While it is incumbent on each City agency to do their own planning, centralizing plans across departments is needed to ensure that efforts by individual departments complement each other and provide a continuous service to the public. These centralized strategies need to systematically ensure advanced planning results in the proper preparation activities, disaster response activities, and adjustments necessary for life safety and functional recovery. These strategies must also include securing dedicated funding essential to a sustained effort with program longevity and consistent engagement and outreach to connect with the private and public sectors.

POLICY 4.4.2.
Align safety and resilience work by regional, state, federal, and tribal government bodies to expand the reach and strength of local government support in the face of all hazards.

Actions that the City take should be consistent with regional, state, and federal plans and projections. the City should take steps to assist these larger governmental agencies in meeting local needs. The City can pursue cooperative actions with other jurisdictions such as recommending localized and evidence-based strategies, exploring policy advocacy and funding opportunities for alignment, and developing mutual aid agreements.

POLICY 4.4.3.
Form effective and clear partnerships with non-government bodies, such as community organizations, institutions, private companies, and development partners to reach all people, especially Environmental Justice Communities and other vulnerable people.

When a disaster strikes, the "all hands on deck" response requires advance collaboration and partnerships across agencies, sectors, and jurisdictions. The overall response provided by government agencies, the private sector, and the public sector must be evidence-based, timely and proportional, multi-objective, and well measured and quantified. The long-term capacity-building partnerships with major institutions, like hospitals and universities, private development partners, and community-based organizations, will support response, recovery, and reconstruction activities meeting the highest resilience strategies.

The response, recovery, and reconstruction strategies must be based on strong, local evidence in order to reach all people at the neighborhood-by-neighborhood or block-by-block level. The strategies must be acutely aware that the climate crisis is an emergency that is already impacting communities and the environment, and so there is urgent and transformative actions needed. The strategies must be developed around racial and social equity and long-term sustainability, and they must be tracked as close to real-time as possible, so that adjustments and recalibration can be made in an informed way.

Goal 5. Response

Provide San Francisco residents, workers, and visitors with the essential support and services needed immediately following a disaster for life safety and functional recovery. The first days after a disaster make up the response phase. Immediate response will focus on saving life and property damaged by the disaster and restoring functional recovery. The City has a network of emergency response strategies in place. The response activities will provide aid for the community, stabilization of day-to-day conditions, and support reestablishment of the critical economic welfare, social networks, and emotional well-being of the City.

OBJECTIVE 5.1.

LIFELINES. PROVIDE CRITICAL INFORMATION AND SERVICES TO PREVENT FURTHER LOSS OF LIFE AND ESTABLISH COMMUNITY SAFETY DURING THE IMMEDIATE AFTERMATH OF DISASTERS.

POLICY 5.1.1.
Ensure the City's lifeline systems are constantly maintained to be in a state of good repair.

In 2010, the Federal Transit Administration (FTA) launched an initiative to maintain the nation's bus and rail systems. With state of good repair, there are well maintained and reliable bus and rail systems that provide safe, dependable, and accessible services at a full level of performance. These initiatives include having an inventory of all assets; reporting their performance and performance restrictions; and managing assets for preservation, maintenance, and operation.

As example, the transportation system is infrastructure essential to disaster response, such as serving as evacuation routes to move people out of harm's way and limit further loss of life. It is important that the transportation system is maintained to be in a state of good repair, meaning it remains in function or can soon return to function immediately after a catastrophic event. The City should coordinate with relevant government agencies, such as Caltrans and Federal Transit Administration, to preserve and expand transportation investments and financing for a well-maintained and reliable transportation infrastructure.

In San Francisco, the City can extend state of good repair principles to all lifeline systems. Lifelines are systems and facilities that provide services vital to the function of society and are important to the emergency response, recovery, and reconstruction after disaster. These systems and facilities include communication (phone, radio, television, internet), power (electric, fuel, gas), transportation (airports, highways, ports, rail, transit), water and wastewater, and more.

To extend to other lifeline systems, the City should pursue an inventory, reporting system, and asset management plan to ensure the City's lifeline systems and facilities are constantly maintained to be in a state of good repair.

POLICY 5.1.2.
Ensure plans are in place to support people most at risk during breaks in lifeline service.

As events have repeatedly shown, from the Loma Prieta earthquake in 1989 to SARS-CoV-2 in 2019, the most vulnerable populations become even more vulnerable when the City is disrupted by disasters. Gaps in transit service can drastically impact immobile populations such as the elderly, low-income, and medically fragile, especially in terms of their access to medical care. Loss of electrical power can also be a problem for homebound and medically-dependent individuals. Programs to notify officials, especially power providers, of these individual locations should be developed so that patients who may be unable to help themselves during a power outage or any other emergency can get the necessary support, including continuing medical care for chronic conditions and delivery of prescription refills.

POLICY 5.1.3.
Mitigate threats posed by digital hazards, such as terrorism and communication failures, to City systems and infrastructure.

While the City does maintain some risk of terrorism, it is more likely at risk of deliberate acts intended to impact its service and communication networks. Often the objective of such acts is not destruction or death, but disturbance—a visible impact to the City's public services, economies, and social networks. Critical facilities include the City's communication systems, such as its fiber-optic data network and network data, its physical infrastructure, such as its water and power systems. It is important to upgrade public facilities to enhance security, through physical security measures, cyber protection measures, and tight security procedures and policies as technology and practices improve. Redundant networks will help ensure that incidental failures do not have grave impacts.

The communications asset class transmits voice and data communications by cable, telephone, or broadcasting. San Francisco Department of Technology manages a wide array of communications systems, including radio, TV, internet, City internal data network, public warning sirens, emergency call boxes, communication path for traffic signals, and the Mayor's Emergency Telephone Systems (METS). In addition, private communication operators own TV and radio antennas, cell sites, hubs, fiber networks, and switches for TV, radio, internet, cell phone, and voice communications.

The key City-owned systems include the municipal fiber optics network, data centers, and an 800 Mhz radio system.

- **Fiber optics network:** This fiber network provides internet access, email, and VoIP communications. There are hundreds of miles of fiber optic cable connecting every municipal building in San Francisco.
- **Data centers:** The primary data center located in San Francisco stores, manages, and disseminates the data for most of the City's communications systems. A back up data center has been established in Rancho Cordova, CA. There are two separate network paths to Rancho Cordova for redundancy.
- **800 Mhz radio system:** The City is transitioning to a new 800 MHz radio system for emergency communications. The system relies on 11 antennas placed on buildings or high locations throughout the city, with two antennas located outside of San Francisco in Daly City and San Bruno. Most antennas are located on shared radio tower sites on buildings or high ground. The towers are not owned by the City. They are built to the highest seismic standards, but the performance of the buildings on which they are

placed is generally not known. Loss of one or more antennas in the network will degrade communications, but the system is designed so it can remain operational despite loss of several antennas. The antennas are connected to each other by fiber cables and microwave paths. The radio towers have back up power.

The private communications systems are owned by a wide range of operations, including Verizon, AT&T, T-Mobile, and Comcast, as well as private fiber optics networks and data centers that these operators rely on.

POLICY 5.1.4.
Increase communication capabilities in preparation for all phases of a disaster, and ensure communication abilities extend to hard-to-reach communities.

Communication will be necessary and critical to the City in the response phase immediately following a disaster and in the recovery and reconstruction period. The City should have redundant networks in place to communicate at all levels, to coordinate internal staff and emergency response personnel, and to convey public information. The public communication should be equitably disseminated to ensure outreach to special needs populations, such as the hearing impaired or non-English speakers. The communication methods should be culturally competent, address the digital divide, and be independent from reliable cell service, such as outdoor public warning systems.

In addition, existing neighborhood organizations can develop local models that serve the same purpose. Development of a neighborhood communications plan can allow community members to keep in touch with, and keep track of, their neighbors, particularly the elderly or disabled that may be most in need of support during a time of emergency. Elements of this plan could include phone trees, text message trains, and the establishment of physical block captains to perform door-to-door checks if necessary.

The Department of Public Health's Community Response Plan calls for community members and organizations to have the means necessary to be inform policy makers about the damage and critical needs of each neighborhood throughout the City. By having a method for communicating at the neighborhood level, community members will be able to notify officials and seek out help in areas of the City that might be difficult to reach after a disaster.

POLICY 5.1.5.
Develop a system to convey information during and immediately after a disaster.

In addition to conveying general public information about the disaster to people and the outside world, the City will also need to respond to more personal inquiries by impacted people. This can include questions about what services and aid is available, as well as inquiries about the location, health, and welfare of relatives or other community members.

The City should plan for an information system composed of a series of local Public Information Centers intended to convey more personalized information to the public. These centers should be located in accessible community locations, such as libraries, but should also be sited away from the centers of emergency activity, such as lifeline facilities. They can be outdoor public warning systems, centralized online systems, and decentralized offline systems. These centers should be connected to receive up-to-date information from law enforcement agencies, other City agencies, the school district, public shelters, local hospitals, and the coroner, and they should also be linked to regional centers in other parts of the Bay Area. During a disaster, these regional information centers should be directly linked to consumers via the 311 City phone service.

POLICY 5.1.6.
Follow the National Incident Management System (NIMS) procedures in declared emergency scenarios.

A major disaster will entail assistance from beyond the City's borders, potentially involving assistance of other Bay Area jurisdictions, the state of California, and even the federal government. To coordinate this assistance, the federal government has developed a national approach to incident management, called the National Incident Management System (NIMS), to act as the common language and procedural guide bridging different entities. NIMS was developed so responders from different jurisdictions and disciplines could talk to each other in a common language and work together better to respond to natural disasters and emergencies, including acts of terrorism. NIMS uses a systems approach to integrate the best of existing processes and methods into a unified national framework for incident management. Its concepts and practices cover incident management; standard command and management structures; and emphasis on preparedness, mutual aid, and resource management.

The City's various agencies, particularly those who are its first responders, are already familiar with the NIMS system and utilize its framework in the development of emergency response and other plans. The City should continue this practice, and ensure it is kept up-to-date with current NIMS practices. New approaches that will improve effectiveness are likely to result in refinement of the NIMS over time, so the City should maintain an awareness of any changes and incorporate them into its response planning and practices.

POLICY 5.1.7.
After an emergency, follow the mandates of the Emergency Response Plan and Citywide Earthquake Response Plan.

The Emergency Response Plan directs the City's actions after a disaster, assigning responsibility to agencies and departments. Many of the immediate actions needed to begin the recovery process are described in the Emergency Response Plan, such as debris removal, emergency building assessment and repairs, and meeting the immediate needs of federal and state agencies for information.

The Citywide Earthquake Response Plan supports this plan by providing response actions for the incident of an earthquake. Both plans should be used to guide all responsibilities and activities in the case of a disaster.

OBJECTIVE 5.2.

COMMUNITY PARTNERSHIPS. WORK WITH NEIGHBORHOOD-BASED ORGANIZATIONS AND TRUSTED PARTNERS TO EXPAND DISASTER RESPONSE ACTIVITIES ACROSS THE CITY.

POLICY 5.2.1.
Work collaboratively with nonprofit and community partners to assist Environmental Justice Communities and other vulnerable people during and immediately after a disaster to ensure resumption of social services.

In addition to disrupted infrastructure, such as transit and transportation, power, water, gas and sewer, phone service, the City will also face disruptions to its social services at a time when they may be most needed. The City's most vulnerable populations will be at risk of service disruption and delayed resumption, including seniors, people with disabilities and other functional needs, institutionalized or incarcerated people, youth who have been separated from their families due to the disaster, and residents of single-room occupancy hotels and public housing. Hospitals and clinics may be damaged or overcrowded, schools and daycare centers will be closed, and families may be separated. Centers for special needs populations may be temporarily shut down, due to damage or unavailability of employees. Local services, particularly those meeting the needs of low-income residents, may be ill-prepared to cope.

The City should have continuity policies and plans in place for its services. One way of supporting their immediate resumption would be to establish a policy clarifying that for specified City employees, their primary role as Disaster Service Workers is to carry out their everyday positions in social service provision. In advance of a disaster, processes should be established to ensure the continuity of payments to social service organizations under contract with the City.

The City is not, however, the only service provider that needs to plan for disasters. The City should assist local service providers so that they can resume services immediately following a disaster, including mental health centers, substance abuse services, homeless shelters, community health centers, and senior services. But in past disasters, lack of coordinated planning—between the City and among agencies—has resulted in gaps in aid or in redundant services.

Community-based organizations and neighborhood-level emergency planning efforts should plan for disasters and be in coordination and partnership with the City. Nonprofit groups are key players in disaster response, providing food and shelter in the short-term and assisting in longer-term recovery through services such as health care and job placement. In advance of disasters, the City can support community-based organizations by providing them with employee response training, insurance coverage, encouraging development of contingency plans, and offering opportunities for financial resources.

POLICY 5.2.2.
Identify and retain vendors and contractors to be readily available to respond immediately after a disaster.

When a disaster strikes, there will be a strain on needed goods and services, such as shelter, food, and waste removal. One way to address the urgency of post-disaster needs is to make arrangements with local and regional contractors before disaster strikes. Pre-qualifying of contractors who can respond in emergency scenarios and who have equipment to handle the work is another solution for immediate response.

The Office of Contract Administration maintains an emergency list of supply vendors. The Office should work with other departments to understand the types of supplies that may be necessary in the case of a disaster and have contracting options readily available, including an up-to-date list of qualified contractors. The list should contain sufficient sources for the kinds of goods that will be most in demand after a disaster—tents, food, etc. As-needed contracts should be readily implementable to meet emergency need, and existing contracts and franchise agreements should be reviewed for their applicability in the case of a disaster.

Public Works maintains a registry of construction-related contractors. This list can be a valuable resource after a disaster. The agency should ensure it is kept up-to-date, and that old or unavailable contractors are removed on an annual basis. The City should also explore methods that will enable small and local firms, including minority- and women-owned businesses, to take a more active role in the response and rebuilding process, it may be beneficial to develop a program to train and qualify local contractors for government-backed projects.

POLICY 5.2.3.
Develop and implement plans to accept, train, organize, and utilize volunteers in the delivery of basic emergency management tasks.

Post-disaster, it is likely that the City will see an outpouring of people willing and wanting to help with recovery efforts. The mobilization and reinforcement of these resources will require significant management by City responders. If no system is in place to harness the potential provided by these spontaneous, or "convergent," volunteers, this resource will be lost. Volunteers are convergent when they are unexpected, typically community members who wish to render aide following a large-scale emergency.

During the City's COVID-19 efforts, the Department of Human Resources (DHR) established an Emergency Volunteer Center (EVC) where it credentialed over 1,000 volunteers in the State's Disaster Service Worker Volunteer Program. DHR deployed over 600 of those volunteers to perform volunteer services with the Department of Public Health. The City should ensure that the lessons learned from its COVID-19 volunteer management and response efforts are incorporated into a revised plan for organizing and mobilizing convergent volunteers. This revised plan should encourage working in concert with the City's ongoing disaster service volunteer programs, such as the Neighborhood Emergency Response Team (NERT).

POLICY 5.2.4.
Develop strategies for cooperating with the media.

Having a media communication strategy is an important component of responding to a disaster. Beyond communicating locally and to the region, the media is the means by which the outside world understands what has happened. Media coverage leads to national, and potentially global understanding, of a disaster and its impacts. Media coverage can be a primary factor in attracting public and private aid. It can fuel demands for action and stimulate public support for actions to prevent or mitigate future disasters.

The Mayor's Office of Communication will direct all high-level strategic messaging regarding the City's overall emergency response. The Joint Information Center (JIC) will integrate Mayor's Office of Communication strategic messaging into the myriad of communications produced within the JIC, including media responses, public information alerts and notifications, and proactive social and traditional media content. The Mayor's Office's crisis communications plan should include strategies for openly and honestly dealing with the media. Procedures for disaster media relations should also ensure that the designated spokesperson—and in the case of a disaster, this may not be the usual media spokesperson—understands the depth of the disaster and the details of its impacts. Media kits should be prepared and ready for distribution as soon as possible.

There are frequently concerns about the negative impact of media coverage on a community post-disaster. Because of the nature of media, stories can often be overtaken by a focus on deaths and damage to property. Political leaders may be concerned about the negative publicity's impact on tourism and external investment, or fear that it could incite mass departure of business and residents. Even in the face of these fears, it is important that the City take a positive view of media operations and cooperate with the media based on a policy of openness.

Rather than restricting information, the City should work to present media organizations with a balance of information about the kinds of public actions and safety measures that have succeeded, as well as those that have failed, so that coverage can go beyond simply accounting for totals of loss. A news story focusing on the amount of earthquake damage inflicted could just as easily include information about the number and types of structures that survived because of hazard mitigation measures, and provide information about shelter locations, response and recovery efforts and priorities, and more.

OBJECTIVE 5.3.

HAZARD-SPECIFIC RESPONSE. ADDRESS ANY SPECIFIC, SHARED, OR COMPOUNDING NEEDS FOR COMMUNITY SAFETY IN THE AFTERMATH OF A DISASTER.

POLICY 5.3.1.
Establish a plan to facilitate the continuity of permitting services in the case of a disaster for building repairs and other essential permitting services.

Rebuilding the City post-disaster can be facilitated by increasing the points of access where permitting can occur. With certain hazards, it can be challenging and infeasible to maintain permitting continuity through the San Francisco Permit Center's in-person services. The City can offer a fully digital permitting platform and satellite, in-person permitting centers to offer one-stop City permitting services such as Building, Public Works, and Health permits. Through these accessible modes, permitting can increase building owners' access to services for their recovery planning and can reduce the possibility of overload at the central permitting facilities at the Planning Department and the Department of Building Inspection.

The City should develop a fully digital permitting process to be nimble in its continuity of permitting services and remote staffing capabilities in the event of a disaster. The digital platform can support the permitting roles and responsibilities across City agencies, such as the Planning Department, Department of Building Inspection, Public Works, and the Department of Public Health. These satellite centers can be operated on a temporary basis, perhaps until a targeted number of buildings are brought back online. Depending on the hazard and level of damage, the network of satellite centers may depend on building and outdoor safety, ability to congregate, or staffing availability.

POLICY 5.3.2.
Ensure historic resources are protected in the aftermath of a disaster and support post-disaster restoration of damaged historic buildings.

Preservation of the City's historic resources is an immediate concern when damage is being assessed. The older construction techniques of historic buildings make them more vulnerable to damage, and if the damage is noted without recognition of the resource's historic value, the building can be at risk of further damage or demolition. Having complete and accurate information to document historic resources is fundamental to ensuring they are not lost. This information can be mapped and used by assessors in the tagging of buildings post-disaster.

The Planning Department has been actively engaged in survey work through the Citywide Survey Program. The focus of the program is on neighborhoods that are undergoing long-range planning efforts or are the focus of intense development activity. The Citywide Survey Program will continue survey efforts in neighborhoods outside of Area Plan study areas as resources become available. While that Citywide Survey is underway, the City should make use of existing survey information, including privately developed property reviews, and ensure it is made available to the Department of Building Inspection and any other relevant contractors who may be charged with doing evaluations of damaged buildings.

Post-disaster assessment should include an analysis of the extent of damage to historic areas and resources. In a typical assessment scenario, assessors will attach a green tag if a building is structurally sound, a yellow tag where repairs are needed, and a red tag if the structure is uninhabitable. This system should ensure sufficient protection for historic resources post-disaster, in that all tagged buildings receive more detailed evaluation that considers survey information before any steps towards demolition are taken. The system could also include separate placards identifying the building as a historic resource. Without such identification, the buildings are at risk.

POLICY 5.3.3.
Address hazardous material and other spills by requiring appropriate clean up by property owners, per local, state, and federal environmental laws.

Spills, leakages, and releases of hazardous waste and substances can cause severe damage not only to the environment, but to public health. This is a particular issue for older industrial properties with historic contamination issues, as they convert to other uses or forms of development. In cases where environmental damage or hazardous spills have occurred, the City shall require all property owners and other responsible parties to report and to perform clean up to the level required by local, state, and federal environmental laws. Where such parties delay in this required clean up, the City, working with other regulatory agencies, shall take all measures necessary to ensure public health and safety is protected.

Goal 6. Recovery and Reconstruction

Rebuild San Francisco's built, natural, and social assets and communities towards a more equitable and resilient future. Short-term recovery actions—ensuring reconnection of utilities and services, temporary housing—are often an outgrowth of the response phase. Long-term recovery begins once many of those short-term actions are underway or have been completed—as the rubble and debris have been cleared, major services are restored, and daily operations are reinitiated. The actual reconstruction phase typically takes 5 to 10 years, but it can be much longer. Even across the City, full recovery—return to or improvement beyond the pre-disaster state—can vary considerably from neighborhood to neighborhood. Some areas might be best repaired and rebuilt similar to their pre-disaster conditions, while other areas with pervasive damage may need new area plans applying citywide objectives. Advance planning will improve the City's ability to make decisions quickly and equitably. Longer-term recovery and reconstruction decisions will need to be made by decision makers—including the Mayor, the Board of Supervisors, the Planning Commission, and others—with considerable public involvement by the people most impacted by hazards and their consequences.

OBJECTIVE 6.1.

BUILDINGS AND INFRASTRUCTURE. **MAXIMIZE THE OPPORTUNITIES TO RESTORE AND REBUILD THE BUILT ENVIRONMENT WITH RESILIENCE TO ALL HAZARDS.**

Housing Security and Justice

POLICY 6.1.1.
Support actions to mitigate the spread of homelessness pre-disaster and increase the likelihood that the City's stock of lowest-cost housing will survive post-disaster.

Individuals and families experiencing homelessness have high exposure to risks and are especially vulnerable to hazards. They lack adequate shelter and protection from harm. Post-disaster, especially for catastrophes with potential to destroy housing, the City's existing shortage of affordable housing will be exacerbated. A significant portion of the City's affordable housing stock are provided by some of the neighborhoods most vulnerable to serious damage in an earthquake. Much of the City's lower-cost housing is provided through older buildings, which are more likely to sustain damage in the case of an earthquake. Many of these older units are kept affordable through rent control. Through state-mandated vacancy decontrol, the rent of rent-controlled units may be increased when the unit is vacated, and the unit does not have to be restored if the unit is replaced. Without action, sea level rise and flood hazards may increase risk in lower-cost housing in Environmental Justice Communities. These conditions are likely to exacerbate homelessness and displacement post-disaster.

Damaged affordable housing units and single-room occupancy hotels should be repaired as expediently possible, and if necessary, replaced on a one-to-one basis. Cooperation among the private market, nonprofit agencies, and local, state or federal government sources should pursue achieving a similar level of affordability as units are replaced or made resilient to future hazards. Eviction regulations in the post-disaster period should ensure the disaster is not misused to remove tenants with lower rents.

Pursue policy advocacy at the state and federal levels to enable eviction moratoria and rental relief during disasters, such as the eviction moratoria during the COVID-19 pandemic. This relief should be available to vulnerable people, property owners, and businesses who are displaced by disasters and to facilitate their right to return. In the wake of a disaster, it may be difficult for residents, especially renters, to demonstrate proof of residency and liaise with landlords and property owners. The policy advocacy should identify inclusive eligibility criteria, robust funding sources, and have limited barriers to accessing the relief.

POLICY 6.1.2.
Provide adequate interim accommodation for residents and businesses displaced by a major disaster in ways that maintain neighborhood ties and cultural continuity.

While the City's first priority should be to encourage and enable the retrofit of residential buildings, to minimize damage and allow residents to shelter-in-place following a disaster, the Department of Emergency Management estimates that after a major earthquake, between 20,000 to 90,000 housing units may be destroyed or substantially damaged. Many businesses that provide necessary services to residents will also be displaced. The Care and Shelter Plan establishes a framework for the provision of emergency shelter for the general population. The Care and Shelter Plan should be expanded to accommodate people experiencing homelessness at the time of disaster. Currently, no specific agency is tasked with the responsibility of interim housing, nor with finding temporary space for displaced businesses. Future implementation plans should address these issues.

The City should designate a lead agency to plan for interim housing and business needs. This agency should work in collaboration with state and federal agencies to consider City goals and advocate for the affected communities. To maintain relationships and connections within the community, interim housing and other facilities should prioritize keeping residents in their neighborhoods and near their pre-disaster homes as much as possible.

POLICY 6.1.3.
Repair damaged neighborhoods in a manner that facilitates resident return and minimizes long-term displacement, prioritizing Environmental Justice Communities and other communities disproportionately impacted by housing disparities.

San Francisco neighborhoods have distinct characteristics, and often have long-term residents, businesses, and institutions. Many neighborhoods have distinct cultural identities and provide the bonds of community for their residents. The City, in cooperation with state and federal agencies and community-based organizations, must manage rebuilding to minimize long-term displacement, retain neighborhood cohesion, and expand housing opportunities for communities disproportionately impacted by housing disparities.

As such, plans should provide opportunities for those who lived in the area to return to new or repaired homes and other facilities there. The City should explore methods of providing return rights to tenants that must vacate their unit because of reconstruction, renovation, or improvement. These methods may include the "right-to-return," down payment assistance, lottery preference, and other financial assistance that would relate to accessing private market, below-market-rate housing, and public housing.

POLICY 6.1.4.
Protect individuals and families experiencing homelessness in the wake of disaster.

Homelessness, and the risk of becoming homeless, will be exacerbated by hazards. The 1989 Loma Prieta earthquake damaged homeless shelters and numerous single-room-occupancy hotels that were an important source of housing for the very poor.

In preparation for disasters, the City should inventory its stock of homeless shelters, single-room-occupancy hotels, and transitional living facilities. The City must ensure its post-disaster plans consider major social issues like homelessness. With many properties destroyed or uninhabitable, it will be even more difficult for this challenged population to find suitable housing after an earthquake. Transition to long-term shelter will be needed for those already homeless, requiring long-term aid and greater assistance than is typically required by disaster victims. When a disaster strikes, it can be traumatizing to a community already disproportionately impacted by mental health. The City should pair long-term shelter and aid with comprehensive, evidence-based systems that offer a continuum of care, such as mental health and substance abuse care, social work, and other supportive systems.

POLICY 6.1.5.
Ensure sufficient affordable housing and workforce housing during reconstruction.

Lack of housing can have a severe impact on economic recovery. If the labor pool has nowhere to live, they are unable to work. Limited housing opportunities, particularly for low-income communities and low-wage workers, can curtail the available labor pool for construction activities during rebuilding, and the absence of permanent housing once businesses have come back online may cause local employees to seek work elsewhere.

The City should partner with the business community in restoring workforce housing for the community after a disaster. The most useful assistance local businesses can provide may be financial contributions, whether they are at-large contributions coordinated by the City or direct subsidies offered to their own workers. Some possible methods include the development of employer-directed community land trusts or rental deposit and down payment grants for displaced workers.

Reinforce Hazard Mitigation

POLICY 6.1.6.
Encourage continued and adaptive reuse of San Francisco's existing building stock, including those with architectural and historical merit, to reduce greenhouse gas emissions that may otherwise occur from new construction.

Post-disaster, the City should prioritize the repair and rehabilitation of existing buildings. As feasible, existing buildings should follow life safety and functional recovery standards, and then, be recovered as close as possible to pre-disaster conditions and use. This repair and rehabilitation of existing buildings, as compared to new development, will mitigate greenhouse gas emissions, especially when reinforcing climate mitigation principles.

In addition to those with architectural and historical merit, existing bodies contain embodied energy, and thus, their preservation can be a sustainable practice when compared to new construction. The practice of reuse can reduce or completely eliminate greenhouse gasses that are emitted as the result of demolition, manufacturing and transport of building materials, and new construction—the greenest building is one that is already built. Furthermore, less environmental strain is caused from the reduced extraction of natural resources from materials development and reduced solid waste from demolition. Promoting the reuse, rehabilitation, and restoration of existing buildings can thus help to reduce the City's carbon footprint, serving as a valuable climate mitigation technique.

POLICY 6.1.7.
Apply sustainability practices in rebuilding projects, consistent with the City's Climate Action Plan and greenhouse gas emissions reduction targets.

Particularly with large-impact earthquakes, buildings and infrastructure may be compromised or destroyed. Salvaging their materials not only aids in reducing the amount of debris going to a landfill and reducing air quality emissions associated with demolition, it also contributes to the local economy and supports the rebuilding process. The City should support the establishment of new businesses that can reclaim, warehouse, and resell salvaged materials. The City should also provide incentives to promote incorporating salvaged materials in construction.

One way the City could support a market for these materials is to develop policy that requires rescue and reuse of salvaged materials in new development and rebuilding projects. The City has many green building requirements already in place that should be reconsidered and perhaps expanded in light of projected post-earthquake rebuilding needs.

POLICY 6.1.8.
Ensure equitable outcomes in the consideration of design character and quality in all rebuilding projects.

A disaster may damage many of the neighborhoods and buildings that contribute to the City's urban design character, and it is imperative that reconstruction be done in a way that will strengthen urban design character, as the city continues to grow and evolve. The City's attitude toward rebuilding will have to balance sometimes competing objectives—the need to rebuild quickly, the need to rebuild equitably and with robust input and participation of the affected communities, and the desire to maintain or improve design character. All reconstruction should be centered in racial and social equity and should follow the framework put in place by the post-disaster recovery and reconstruction plan, as well as the urban design standards and design guidelines already in place in the city.

It is important that large-scale rebuilding does not succumb to the political pressure of property owners to rebuild, at the sake of important interests in racial and social equity, community participation and engagement, urban design, historic and cultural preservation, and hazard mitigation and resilience opportunities. While other policies speak to the need for timeliness in reviewing reconstruction projects, the policies developed must ensure humane outcomes for vulnerable communities and that design character and quality are not ignored in the urgency of rebuilding.

OBJECTIVE 6.2.

ADVANCE RECOVERY PLANNING. COMPREHENSIVELY PLAN FOR THE RESTORATION OF CITY FUNCTION AND ECONOMIC ACTIVITY, WITH FLEXIBILITY TO KNOWN AND UNKNOWN HAZARDS.

POLICY 6.2.1.
Before an emergency occurs, establish an interdepartmental working group to develop an advance recovery framework that will guide long-term recovery, manage reconstruction activities, and coordinate expedient rebuilding aligned with City policies.

Advance recovery planning is critical role for the City's resilience. A framework for recovery and reconstruction can expedite decision-making based on already agreed-upon priorities and goals. The City's history of disaster has proved that pressures for speedy rebuilding are strong. Therefore, it is critical that the governance and planning framework for recovery and reconstruction be established before disaster occurs.

To provide direction for any planning that happens post-disaster, the Mayor and the Board of Supervisors should establish an interdepartmental working group to create a framework for recovery and reconstruction. The working group should be comprised of representatives from the following departments: the Mayor's Office, Mayor's Office of Economic and Workforce Development, Mayor's Office of Housing and Community Development, Controller's Office, Chamber of Commerce, City Attorney's Office, City Administrator's Office, Office of Resilience and Capital Planning, Office of Community Investment and Infrastructure, Office of Racial Equity, Department of Building Inspection, Department of Emergency Management, Department of the Environment, Planning Department, Public Works, Public Utilities Commission, Human Rights Commission, the Board of San Francisco Travel, the Academy of Sciences, among others.

The framework should outline the City's priorities and guidelines for the City's post-disaster recovery and reconstruction. This framework should be tested through scenario planning before being developed fully into a post-disaster recovery and reconstruction plan. While such an effort cannot anticipate the impact of every disaster, the effort can reduce the demands of rebuilding after a disaster.

POLICY 6.2.2.
As a part of the advance recovery framework, develop and adopt a repair and reconstruction ordinance.

The rebuilding and reconstruction efforts that will need to be undertaken after a disaster will need to be swift in repairing lifelines, homes, and other resources the City depends upon. After a disaster, the Departments of Building Inspection and Planning will likely see a surge in permit applications. While the Department of Building Inspection already maintains procedures to deal with emergency repairs, the City does not have plans to deal with the sustained demand that may result from large-scale reconstruction. Upon completion of the advance recovery framework, the task force should develop a recovery and repair ordinance that help implement the framework and facilitate the repair and reconstruction of buildings following disaster.

The recovery and repair ordinance should build upon existing building and planning code standards and policies to facilitate an efficient reconstruction process, help to simplify and expedite the permitting and review process, support integration of racial and social equity and resilience principles, while avoiding a hastily administered permitting process. The ordinance should establish clear permit processing and review procedures to expedite rebuilding in the post-disaster period, while providing the amount of review necessary to ensure that reconstruction meets the City's objectives and appropriate local policies, plans, and code standards, yet is economically feasible.

The ordinance should consider policies to address nonconforming uses and buildings, explore modifications to outdated codes and standards, consider the applicability of the City's notification or other review procedures, and address historic buildings to ensure that, to the greatest extent possible, repairs maintain the integrity of the structure without adversely affecting its historic nature. The ordinance should also revise post-earthquake building inspection protocols to identify buildings that have reached functional recovery that can be occupied safely despite damage and loss of utilities, allowing residents to safely shelter in place while waiting to make repairs.

The ordinance should create priority categories for building types, prioritizing critical response facilities first. The ordinance should also be clear on the length of time during which it is applicable. It is important that the ordinance not work in conflict with other City goals. Large-scale damage to confined areas might warrant specific neighborhood-level plans or reconstruction guidelines, and these will take time to prepare. If necessary, the ordinance should allow for periods of non-building while important changes are adopted into law. The ordinance should also include sufficient provisions to ensure that it is evaluated, and amendments can be made as needed, post-disaster, to appropriately address the disaster impacts.

POLICY 6.2.3.
As a part of the advance recovery framework, coordinate the realignment of government post-disaster, so City employees' skills can be used effectively towards recovery and reconstruction efforts.

New roles and responsibilities for governments will emerge after a disaster strikes. It is imperative that government be nimble enough to adjust to the various new roles after the disaster. The City should be willing to reconfigure offices, departments, and services to be best serve the public after a disaster. The Disaster Service Workers program may extend into recovery and reconstruction phases.

For instance, there might be the need for the Planning Department, Public Works, or Department of Building Inspection to work together in teams and be decentralized with satellite offices set up in neighborhoods that were particularly devastated by a disaster. By placing them in neighborhoods, their time can be better spent on the ground understanding what type of reconstruction is necessary and possible, through inspections and site visits with building owners and residents.

POLICY 6.2.4.
Update the advance recovery framework on a regular basis so that it continues to be aligned with City goals and values.

The advance recovery framework should be updated as necessary to reflect changing conditions, changes in City policy and technology, and changes in state and federal regulations that affect post-disaster recovery management, financing, and other processes. The task force should set, in its creation of the plan, a schedule for regular updates to ensure it keeps up with shifting community priorities as well as to keep it present and important in the public's mind. The community must be involved in the process to identify and develop the community priorities, along with the specific core values of recovery. The advance recovery framework can inform more targeted resilience planning processes that are place-based or site-specific, such as in Environmental Justice Communities or other areas vulnerable to disaster.

POLICY 6.2.5.
Develop and maintain broad public support for the advance recovery framework to ensure its eventual implementation.

Once an advance recovery framework is developed, its work is not over. Implementation of the framework post-disaster is its critical mission, and achieving this in the aftermath of a disaster will require vigilance on the City's part. Community demands for rapid reconstruction will likely be perceived by many to be in conflict with calls for post-disaster planning and time needed to complete such a process.

The City should develop an ongoing program to regularly train the City's leadership and build community support for the framework to ensure its implementation in a time-compressed and high-pressure post-disaster environment. While there will always be tensions to rebuild quickly post-disaster, the desire for haste should not preempt the implementation of the recovery framework or undermine a potentially necessary recovery and rebuilding process. The community outreach process for the advance recovery framework should provide a vehicle to strengthen community support.

POLICY 6.2.6.
Post-disaster, build upon the advance recovery framework to create a recovery and reconstruction plan to direct the City's reconstruction activities, manage the long-term recovery period, and coordinate rebuilding activity.

Using the pre-disaster framework as the basis for all planning, the next step is turning that framework into tangible actions to direct and manage the specific impacts of an actual disaster.

Therefore, after a disaster occurs, the City shall establish a recovery and reconstruction task force to guide the planning process and plan development built upon the City's recovery framework. The task force should be made up not only of City agencies represented in the working group, but also a range of community representatives, including business interests, nonprofits and industry leaders, policy advocates, and neighborhood representatives. The task force should also engage with and involve representatives of other counties, state, and federal agencies. The task force's efforts should be directed by a designated lead agency or individual who can facilitate the recovery and reconstruction planning process and oversee its implementation.

The task force will be responsible for the development, drafting, and adoption of the post-disaster recovery and reconstruction plan, following the established framework and guidelines. Perversely, a disaster may present the City with a unique opportunity to physically, economically, and socially strengthen the City and the region equitably; the recovery and reconstruction plan should take advantage of this opportunity.

POLICY 6.2.7.
Rebuild after a major disaster consistent with established General Plan objectives and policies.

The General Plan has been adopted, after much public consideration, to assure the preservation, enhancement, and safety of this very desirable urban environment. In efforts to restore damaged areas of the City, existing development policies and regulations should be respected. Opportunities may be created for realizing General Plan policies, such as increasing affordable housing, improving circulation

systems, and providing public or private open space. In areas with extensive building and infrastructure damage, an area plan may be the best approach to coordinate rebuilding to take advantage of opportunities for neighborhood improvement. The rebuilding process may also enable possibilities for advancing environmental justice, increasing mobility through improved and increased public transit, as well as other alternatives to the private automobile. Future Elements and Area Plans of the General Plan should be formulated with an awareness of their potential applicability in relation to disaster recovery.

POLICY 6.2.8.
Ensure that an equitable recovery and reconstruction plan is adopted that is comprehensive and consistent with already established City goals, policies, and programs.

The recovery and reconstruction plan will need to prepare the City to meet immediate changing needs after a disaster. Special services and facilities will be needed on a short-term basis, including temporary housing, commercial facilities, and health and human services. During the recovery period, it may be necessary to temporarily locate these facilities in areas not normally available for development, or at higher densities than is normally allowed. Extensive damage may warrant reconsideration of large-scale issues such as housing locations, transit, and public infrastructure such as streets and freeways. A detailed recovery and reconstruction plan may require planning at scales that exceed existing policies and controls.

The recovery and reconstruction plan should build upon established General Plan goals, objectives, and policies, and ensure consistency with City programs, policies, and regulations. The plan should include clear policies and programs addressing the following at a minimum:

- Coordination with federal and state agencies
- Coordination with other regional cities and counties
- Protection of Environmental Justice Communities and other vulnerable people
- Plans for interim housing (considered to be a part of long-term planning, because many of the housing solutions may become permanent)
- Plans for financing and incentivizing housing repairs and construction of potentially large numbers of replacement housing units, including consideration for affordability needs
- Plans for land use decisions and recommended changes in response to local opportunities
- Establishment of public reconstruction priorities

The recovery and reconstruction plan may also consider potential changes to the City's physical framework and development pattern, potentially reviewing issues such as:

- Structurally and geologically hazardous conditions and mitigation options
- Re-examination of street patterns, street design, and standards such as required width, etc
- Designation of areas for consideration of land acquisitions, reconfigurations, consolidations, and subdivisions
- Comprehensively addressing environmental justice issues
- Recommendations for changes and improvements to major transportation routes, transit networks, and other lifelines
- Revisions to City infrastructure networks, including possible undergrounding of utilities, and use of new technologies in service provision
- Guidance for financing and advancing the City's long-term economic recovery.

While the specific uses of public lands may vary after a large-scale disaster, public lands must be preserved for public purposes. As circumstances allow, pursue opportunities for expanding public lands for public purposes.

POLICY 6.2.9.
Where necessary, use the City's public authority to expedite repair, reconstruction, and rebuilding in a just and equitable manner.

In the aftermath of a disaster, there may be properties that lie fallow for some time. The damage may be so severe that owners without insurance simply abandon properties; absentee owners and landlords could choose simply to not return; and there may be cases where it is not economically feasible or possible for owners to rebuild.

The City maintains the authority to impose policies, rules, and regulations to protect the public welfare, order, and security. If public welfare is at stake—for example, in damaged rental properties that remain unrepaired and unoccupied, are a safety or health hazard, or have deteriorated to such a degree that they are unlikely to be restored to quality housing—the City may need to explore ways of restoring these units through partnerships with community-based organizations, neighborhood-based efforts, and other key stakeholders.

The City should carefully consider the lessons from history prior to exercising eminent domain. There have been historic misuses of the power of eminent domain that have significantly harmed communities. In the 1940s, eminent domain harmed the Japanese American community during internment with forcible loss of property and belongings. In the 1950s, the City exercised eminent domain once again and harmed the African American community during redevelopment of the Western Addition and the Fillmore. These pernicious events should be used as cautionary tales for future uses of this tool. The power of eminent domain can be used to expand public benefits, such as the Hualapai Nation of Arizona exercising its authority to reclaim land for tribal ownership and use. The City also used eminent domain to expand public benefits through the Central Subway, extending Muni light rail service.

In addition to health and safety, the City should prioritize housing equity in the community. The City can consider the return and retention of the American Indian community, Black community, and other communities of color post-disaster; the housing needs for individuals and families with experience of homelessness; the community needs for low-income and other vulnerable people; and the recovery and growth of the local business community.

OBJECTIVE 6.3.

EQUITABLE INVESTMENT. PURSUE PLANS AND STRATEGIES THAT WOULD EQUITABLY REBUILD SAN FRANCISCO FOR EVERYONE, STARTING WITH ENVIRONMENTAL JUSTICE COMMUNITIES.

POLICY 6.3.1.
Develop an economic recovery strategy to guide planning and implementation before the disaster strikes.

A disaster can have a major impact on the economic landscape of the City. Previous earthquakes have resulted in dramatic losses in office space and subsequent relocation of businesses; in drops in tourism, which is one of the City's major industries; and disproportionate impacts on small businesses, who have fewer resources with which to recover. The City should ensure an economic recovery strategy is in place to equitably foster business resumption and growth post-disaster.

In the wake of a disaster, many local businesses, particularly small businesses, will struggle to resume activity. They may have lost assets, necessary facilities or equipment, access to employees, and even their customer base. While the City's own funds will be limited from providing direct financial assistance, there are many other things it can do to support businesses. For example, in response to the COVID-19 pandemic, the social distancing and masking requirements, as well as discouragement of sharing indoor space, made it challenging for businesses such as restaurants and small retail shops from operating normally. The City's Shared Spaces Program supported small businesses by allowing them to expand their operations to outdoor places like sidewalks, streets, and open lots.

The City can encourage loan and grant funding from non-government sources, and further affected businesses' ability to secure loans from local banks or unions by offering government guarantees on loans. Tax incentives should be explored to encourage reinvestment and growth of business, including temporary payroll tax exclusion, sales tax exemption and tax write-offs on replaced business equipment and furniture, and property tax abatements.

The economic recovery strategy should prioritize the elements of the City necessary to support business activity, starting in Environmental Justice Communities, such as the restoration of transit and regional roadways; utilities and services available to the business community; and housing availability for the local workforce and customers. The City should work with the business community to develop this strategy, and solicit wide advice on how to facilitate business revitalization. The strategy should use the latest assessment tools provided by the Office of Racial Equity and center the needs of businesses that are owned by and/or serve residents in Environmental Justice Communities. The strategy may include recommendations to hasten the resumption of business such as loans, funding for workplace building repair, and financial assistance. Updates to the City's Economic Strategy, created by the Office of Economic and Workforce Development, should include plans for economic recovery in case of a disaster.

POLICY 6.3.2.
Support the efforts of the Controller's Office to ensure service continuation and financing of post-disaster recovery and reconstruction efforts.

The Controller's Office is the designated lead agency for the Finance and Administration Section of the Emergency Response Plan, supported by the Department of Administrative Services and the Office of the Treasurer. These groups are tasked with ensuring employee payment and compensation, and with payment of contractor and vendor accounts, in the immediate response phase of a disaster through recovery to pre-disaster service. These elements will be critical to the continuing operation of City services.

In order to ensure continuation, the Controller's Office has programs underway to ensure that payroll continues to be processed for all City workers, implementing off-site payroll processing if needed; that employee compensation is resumed; that financial and accounting computer systems can recover and resume as soon as possible; and that all payments, both to City workers and to outside vendors, are processed within a reasonable time.

The City should actively encourage the use of direct deposit by all City employees, and inform all employees of the potential loss of pay in the event of a disaster for those who do not use direct deposit. Additionally, the Controller's Office should work with City employees not currently using direct deposit in order to provide backup account information that can be switched to direct deposit in the event of a disaster. The City should assist those employees without access to a bank account to open an account with a bank or credit union.

The Controller's Office will also direct the established financial policies to guide the City in its response and recovery to an emergency, particularly as it relates to personnel time, contracts, and equipment and supplies relating to the emergency. As a part of this responsibility, the Office should work with other City agencies to determine need for contracts with vendors who do not already occur on existing approved vendor lists, and it should set up these new vendor contracts well before the emergency occurs.

POLICY 6.3.3.
Provide the basic needs of all people while lifeline support is interrupted.

Beyond the immediate aftermath of a disaster, and beyond the assurance of infrastructure with explicit life safety purpose, there may still be persistent and critical basic needs for the people of San Francisco as the City recovers from disaster. The City should make a plan and provide support to cover the basic needs for all people while systems are reestablished and communities return to self-sufficiency. The plan should include basic shelter, health, and food needs, and focused on those with the least adaptive capacity for self-care. This includes Environmental Justice Communities, people with disabilities and other functional needs, the young and the elderly, and other vulnerable people.

POLICY 6.3.4.
Explore expanding the scope of the City's disaster relief programs.

The City provides financial relief to property owners through tax programs including disaster relief on property taxes, and participation in the state's Section 69.3 property tax disaster relief program which enables former residents who move to other counties to maintain their previous level of property taxation prior to the disaster.

The City should review other forms of tax relief to affected residents and business owners, including reductions on other fees and taxes. There are many local taxes and fees that are under the jurisdiction of the City, and the City has the authority to waive or defer such taxes and fees in an emergency.

Educating residents about the lack of access to funds in the event of a disaster is critical. The Office of the Treasurer and Tax Collector should be involved in working with financial institutions and educating the public on how to access private funds during a time when typical procedures will not be possible. For example, the City can leverage banking contracts to assist residents directly with cash payments.

POLICY 6.3.5.
Ensure effective use of public emergency funds and expenditures, and recovery of those expenditures.

The Controller's Office is responsible for tracking expenditures for the cost of responding to, and recovering from, the disaster. This includes tracking, recording, and reporting on all payments made in response to the emergency, including personnel working during the emergency, outside contractor work, and expenses such as supplies, materials, equipment, and vehicles.

It is important that the tasks that are authorized are relevant and necessary, and that their completion is well-documented by the Controller's Office and its supporting agencies. This documentation will be critical in submitting disaster reimbursement claims to the state and federal government and ensuring support funding is received.

Glossary

This Glossary is intended to define key words and phrases used throughout the Safety & Resilience Element of the San Francisco General Plan, to guide interpretation of the goals, objectives, and policies.

adaptation, adaptive capacity

- Adaptation is the ability, competency, and capacity of a system to adjust to variables. Climate Adaptation is the proactive measures taken to adjust the built environment and human systems to reduce harm from the impacts of the climate crisis.

- Adaptive capacity refers to the ability to adjust functions to reduce harm. In social systems, it refers to the ability of institutions and people to problem solve and take opportunities for recovery and reconstruction. It includes the ability of San Francisco's individuals, communities, institutions, businesses, and systems to survive, adapt, and grow, no matter what kind of chronic stresses and acute shocks they may experience. For San Francisco this means (1) the ability to quickly respond and recovery from a disaster or large shock; (2) the ability to address systemic crises such as lack of economic mobility, inequity, poverty, and housing shortages; and (3) the ability to prepare for and address slow-moving disasters like climate change and sea level rise.

disaster

- A disaster is a hazard that has occurred, or a hazard event. A disaster is often—but not always—sudden and causes loss of life or great damage. The terms “disaster” and “hazard” are often used interchangeably. See *Hazard.*

environmental justice, Environmental Justice Communities

- Environmental justice is the equitable distribution of environmental benefits and elimination of environmental burdens to promote healthy communities where everyone in San Francisco can thrive. Government should foster environmental justice through processes that address, mitigate, and amend past injustices while enabling proactive, community-led solutions for the future.

- Environmental Justice Communities face environmental racism and subsequently bear disproportionate environmental burdens. Environmental Justice Communities are disproportionately low-income communities and communities of color. Leadership by Environmental Justice Communities must be involved in the creation and decision-making of environmental justice solutions. In San Francisco, Environmental Justice Communities are identified through the Environmental Justice Communities Map incorporated here by reference, and are defined as the census tracts with the top 30% of cumulative environmental and socioeconomic vulnerability across the City. The Environmental Justice Communities Map was developed in response to California Senate Bill 1000 (SB 1000) which requires cities and counties to adopt a map of “disadvantaged communities” and adopt environmental justice policies in their General Plan to address “unique or compounded health risks.” The Environmental Justice Map and Framework is expected to be adopted into the General Plan in 2023.

functional recovery

- Functional recovery is a standard for buildings and lifeline infrastructure to be designed and constructed to support the basic intended functions of a building soon after an earthquake or other severe hazard, such as eating, sleeping, shopping, or learning. This standard includes maintenance and the restoration of occupancy within a determined maximum acceptable time, and goes beyond life safety standards.

green building, green infrastructure

- The principles of green building lead building design, construction, and operation to reduce or eliminate negative impacts, and can create positive impacts, on climate and the natural environment. The local context, such as climate conditions, building types and age, and cultural traditions, contribute to green building approaches. In San Francisco, these principles are supported by the Green Building Code.

- green infrastructure is an approach to water management that protects, restores, or mimics the natural water cycle. It can be effective, economical, and enhance community safety and quality of life. Green Infrastructure incorporates both the natural environment and engineered systems to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife.

hazard

- A hazard is a source of potential danger or an adverse condition that could harm people, socioeconomic systems, or built and natural environments. Hazards can occur naturally and/or by human influence. As interactions between society and the natural environment are complex, it can be difficult to delineate a singular source of hazards (e.g., human-influenced ignition of fires during drought conditions, development in low-lying areas prone to flooding).
- Geological Hazards include: Earthquake, Tsunami, Landslide, Dam or Reservoir Failure
    - An earthquake is a sudden slip on a fault in the earth’s crust, and the resulting ground shaking and radiated seismic energy caused by the slip.
    - A tsunami is a series of ocean waves caused by sudden movement of the sea floor, typically as a result of major earthquakes.
    - Landslide is a general term used to describe the downslope movement of soil, rock, and organic materials under the effects of gravity.
    - A dam or reservoir failure is an unplanned release of water resulting from the structural compromise or collapse of a dam or other structural element, such as the wall of a tank.
- Weather-Related Hazards include: Flooding, High Wind, Extreme Heat, Drought
    - Flooding is covering or inundation of normally dry land with large amounts of water, can be caused by the overflow of water from a stream, river, lake, coastal body, or a water control feature such as a pipe, dam, or levee.
    - The National Weather Service defines “high winds” as sustained wind speeds of 40 miles per hour (mph) or greater lasting for one hour or longer, or winds of 58 mph or greater for any duration.
    - According to the National Weather Service, extreme heat occurs when the temperature reaches extremely high levels or when the combination of heat and humidity causes the air to become oppressive and stifling. Generally, extreme heat is 10 degrees above the normal temperature over an extended period.
    - Drought is insufficient water over a prolonged period.
- Combustion-Related Hazards include: Large Urban Fire, Wildfire, Poor Air Quality
    - A Large Urban Fire is a large, destructive fire that spreads across one or more City streets.
    - A Wildfire is an unplanned, uncontrolled fire in an area of combustive vegetation or fuel.
    - Poor Air Quality is the condition of ambient air quality having high concentrations of air pollutants that are unhealthy to public health and the environment. The U.S. Environmental Protection Agency measures air quality with the Air Quality Index (AQI), which measures the concentration of five pollutants regulated by the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. When AQI exceeds 100, air quality becomes unhealthy for certain sensitive groups of people, then everyone as air quality worsens.
- Biological and Toxic Hazards include: Pandemic, Hazardous Materials
    - A Pandemic is when an infectious disease outbreak occurs worldwide, or over a very wide area and affects many people.
    - Hazardous Materials are harmful both to human health and to the environment. An accidental hazardous material release can occur wherever hazardous materials are manufactured, stored, transported, or used.

infrastructure

- The assets and systems that deliver public services to a community, such as roads delivering goods and transportation options, telephone lines and fiber optic cables delivering internet, pipes and pumps delivering water, and the power grid delivering energy.

lifelines

- Lifelines are the systems, assets, and facilities that provide services vital to the function of society and important to emergency response and recovery after disaster. These lifelines include water, sewer, and power provision; communication networks such as phone, radio, television, and internet; transportation; food; shelter; health; and more. By definition, these lifelines can extend beyond City boundaries. For example, state and private agencies operate some regional lifelines, like highways or internet.

mitigation, hazard mitigation

- Mitigation is the reduction of vulnerabilities, risks, and impacts of hazards on people, assets, and the environment. Often strategic nearer-term investments, mitigation actions can lessen the scale and intensity of potential future damage, thereby reducing response and recovery expenditures. Proactive hazard mitigation is particularly important for protecting the most vulnerable populations.

- Hazard mitigation is a series of sustained actions taken to reduce or eliminate short- and long-term risks to life and property from hazards.

racial advantage (or privilege)

- Racial advantage, or privilege, is the unquestioned and unearned set of advantages, entitlements, benefits and choices bestowed on people solely because of their race.

racial and social equity

- Racial equity is the systematic fair treatment of people of all races that results in equal outcomes, while recognizing the historical context and systemic harm done to specific racial groups.

- Social equity is the systemic fair treatment of people of all social groups that results in equal outcomes, while recognizing the historical context and systematic harm done to specific groups, such as along gender identity, sex, religion, and disability status.

racial disparity

- Racial disparity is a condition where one racial group systemically and disproportionately experiences worse outcomes in comparison to another racial group.

recovery and reconstruction

- Recovery and reconstruction involve activities that restore and rebuild communities post-disaster—with fundamentals such as housing security, business resumption, lifeline restoration, and provision of essential services. The thoughtful rebuilding of day-to-day livelihoods can advance San Francisco towards a more equitable, sustainable, and resilient future.

resilience

- Resilience in San Francisco describes the capacity of individuals, communities, institutions, businesses, and systems within the City to survive, adapt, and grow, no matter what kind of chronic stresses and acute shocks they may experience. It is important to note that resilience is a concept that extends beyond preparation for discrete natural disasters and should be defined in connection to issues such as climate change, escalating urbanization, and other disruptions of daily life.

response

- Response efforts provide critical information and emergency services during and immediately after disasters. It focuses on saving lives and preventing further injury to people and places, particularly focused on vulnerable populations. Response activities bring immediate support and relief against the social, economic, and environmental consequences of disasters.

risk, risk reduction

- Risk is the chance that a given hazard could occur multiplied by the understood consequences of an impact on people, socioeconomic systems, or the built and natural environment.

- Risk reduction includes regulatory controls, plans, policies, programs, projects, initiatives, and anything else employed to eliminate, avoid, or minimize risks.

safety, life safety

- Safety is the state of being protected from harm or danger. This includes physical and mental harm from external and internal dangers.

- Life safety refers to building performance that prevents partial or total structural collapse and limits damage to nonstructural and non-life-threatening levels.

vulnerable communities

- For the purposes of the Safety & Resilience Element, vulnerable communities describe communities who experience heightened risk and increased sensitivity to potential harms than the City average. To be vulnerable means possessing a lower adaptive capacity to withstand stresses, and often means that these people and places are hit the “first and worst” by disasters. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factor(s), which are exacerbated by adverse climate impacts. The specific population groups encompassed by this term vary from issue to issue, and vulnerability can be defined by a variety of factors, such as geography, demographics, health disparities, and asset ownership. For example, vulnerable communities can include seniors, people with disabilities and other function needs, institutionalized or incarcerated people, youth who have been separated from their families, residents of single-room occupancy hotels and public housing, and others. The designation does not describe any intrinsic characteristic of a group of people, but rather a failure of society and systemic actions which have rendered them vulnerable.

2022 Safety and Resilience Element adopted by the San Francisco Board of Supervisors Ordinance 0260-22 on 12/13/2022.

EXHIBIT 25



St. Nicholas Antiochian Orthodox Church

Antiochian Orthodox Christian Archdiocese of North America

5200 Diamond Heights Blvd, San Francisco, CA 94131

Parish History (from the 75th Anniversary, 2013)



On December 5, 1937, Founding parishioners gathered at a banquet with this Eminence Archbishop Antony Bashir to express their desire for a church in San Francisco. It was from this very enthusiastic gathering that plans for a church emerged. St. Nicholas parishioner, Elias Habeeb later recalled how his mother saw a building for sale at the corner of Gough and Green Sts. and told other leaders in the community about it. Eight months after the banquet the building was purchased and remodeled to meet Orthodox requirements.

The Ladies' Aid Society was formed and became the most vital arm of the Church. Led by Rose Naify, other members included Genevieve Naify, Victoria Habeeb, and Sadie Habeeb. The first Board of Directors: President, Nick Sahati ; Vice President, Shaded Romley; Treasurer, Fred Salih; and Secretary Dr. Carl Rayes. The Directors were: Aziz Anthony, Charles Anthony, Toufic Aswad, Fred Ayoob, Issa Badran, Tanios G. Habeeb, Elias Jeha, George Naify, James A. Naify, Mitry Ofeish, S.G. Sadallah and Dr. Simon Zachariah.

In September 1938 the church was incorporated and the following year its first full time priest, Father Brahim Corey served his first Liturgy. Within the next two years the pledge system was instituted, the first Sunday school class was held and the church was consecrated.

In 1944, Father Michael Khallouf became the second pastor. During his pastorate, the end of World War II was celebrated with a special liturgy of Thanksgiving. In 1947, plans for a larger church began. In 1951, the first youth group was formed. A building fund was established when a founding member bequeathed $5,000 toward the building of a new church.

October 1, 1952, Father Elias Karim became the Church's third priest. He served until 1964. During that time there were many firsts: The first choir was formed; the first junior youth group was formed; the Ladies Junior Auxiliary was established. In 1957, the church hosted its first Western Region SOYO Convention. The Men's Fellowship was formed.



In 1958, the church purchased a lot near the corner of Portola Drive and Burnett for $7,500, made possible by a personal guarantee by John Dudum and George Anthony. On October 8, 1960 a banquet was held to raise funds for a new church building, Archbishop Antony attended and raised $29,000 in pledges. In January 1960, the Diamond Heights area was being subdivided and St. Nicholas was qualified with six other churches to purchase the lot at the corner Diamond Heights and Duncan. The Agency left the decision up to the churches to pick the winner —- out of a hat. In a most dramatic moment, the President of the Board of Trustees picked the winning number. The lot bought previously was sold in favor of the Diamond Heights location.

Ground breaking ceremonies, with Archbishop Antony presiding, along with Building Chairman, Joey Ayoub, was held in 1962 and construction on the new church began. The first mission in the Bay Area was Church of the Redeemer in Los Altos in 1963. Before that time, St. Nicholas Parish extended from Sacramento to Santa Cruz, and the East Bay. Later that year the first Cadillac drawing was held.On May 10, 1964, Father Gregory Ofiesh became the Church's fourth pastor and celebrated his first liturgy here on Mother's Day. He immediately directed his efforts toward the completion of the construction of the new church building. The East Bay Auxiliary was formed. The old church and parish house were sold. In April 1965, the church was dedicated, Archbishop Bashir presiding. Ten months later Archbishop Bashir entered eternal life.

In March, 1966, Father Philip Saliba was elected as new Archbishop and served his first Hierarchical Divine Liturgy in August at the Archdiocese Convention here in San Francisco. The year 1968 saw our first Archbishop's Cotillion and our first camp program at St. Sava Camp in Jackson, CA. Our young men participated in the Orthodox Basketball Association for the first time winning the Church's first championship. We honored the Mother of the Year and the by-laws were revised.

In 1973, we burned the mortgage of the church. The seventies also welcomed Father John Ocana as our first assistant pastor and Father Gregory celebrated ten years as our Pastor. In 1976 we hosted our second Archdiocese Convention, a week-long event that was remembered throughout the Archdiocese for many years to come.

The Northern California Deanery was established and plans for an educational center began. St. John the Evangelist was established as a new mission in the East Bay. Issa Dib was ordained to the Diaconate. We can never forget our production of the Broadway musical, the "King and I" in 1977!

The Educational Center was dedicated in 1980 and an elementary school with a day care center was opened. The eighties saw the first woman chair of the Parish Council. The mortgage for the Educational Center was burned and plans for church expansion were initiated. The 50th Anniversary of the church was celebrated.

In 1990, restoration and expansion of the church began. Metropolitan PHILIP dedicated the newly expanded church in 1992. The Archbishop's Cotillion featured 15 young ladies in 1993. Bishop JOSEPH was permanently assigned to the Western Diocesan Center.

Father Paul Baba joined St. Nicholas. Father Nicholas Habib joined Father Gregory and Haytham Borzghol became the new youth director. Father John Salem was welcomed as Associate Pastor.

They all went on to successfully serve other parishes. There were dinner dances, Middle Eastern Festivals, but the highlight of the nineties was the visit of His Beatitude IGNATIUS IV, Patriarch of Antioch and all the East.

In January, 2000 the mortgage taken out on the expansion of the church was burned – the church was debt free. Father Gregory announced his retirement in 2000 and a banquet was held in his

honor on December 2.



In January 2001, Father Nicholas Borzghol became the pastor and served until 2012. During that time, we saw the tedious restoration of the outdoor icon of the Sermon on the Mount by a group of dedicated volunteers. Church organizations: Men's Fellowship, Ladies Auxiliary, Teen SOYO continued to thrive. Teen SOYO participated in Parish Life Conferences: Bible Bowl, Oratorical Contests. We succeeded in our bid for the Parish life Conference in 2014. Our basketball team was active in OYAA (Orthodox Youth Athletic Association) and won a championship.

Father George Baalbaki was appointed as Pastor in 2012. Shortly after his arrival, Father George, chatting with Father Gregory, realized that the church would be celebrating its 75th Anniversary in 2013 and thus the idea for this celebration was born. A chairman was appointed, committees were formed, and plans were underway for a three day celebration October 25, 26, and 27, 2013. Simultaneously a committee for the 2014 Parish Life Conference was appointed and plans were started.

There have been many challenges throughout the past 75 years, but the faith and determination of all who have served brings us to this celebration. To each and every one : clergy, choir, St. Ignatius, Parish Council, Men's Fellowship, Ladies Auxiliary, Ladies Aid, Altar Guild, East Bay Ladies, SOYO and Teen SOYO, St. John the Divine, Sunday School teacher or student, faithful supporter of St. Nicholas, we say thank you – you are an important part of the mosaic that makes up St. Nicholas Church.

Our church was built on faith and it is this faith of our fathers that will continue to inspire us in the future.

Like Share Sign Up to see what your friends like.

Facebook: stnicksf | YouTube: @St.NicholasAntiochianOrthodox | Instagram: stnicksf

From: maryfoleyrn@everyactioncustom.com on behalf of Mary Foley
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Thursday, February 5, 2026 7:44:56 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
This MacroTower is only "necessary, desirable and compatible with the neighborhood" according to AT&T & their business goals. Neighbors and visitors disagree. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.
AT&T stated in Dec '25 FCC filings: "AT&T will continue to require additional macro facilities to densify its wireless networks. And it will require additional macro facilities to meet public safety needs, as directed by The First Responder Network Authority (FirstNet)."
4 of 7 Planning Commissioners approved the project based on AT&T's false claim that this massive tower is essential for 911 service and First Responders' FirstNet access. According to Police and Fire, their First Responders are not required to use FirstNet and 911 calls go to the nearest carrier.
The proposed structure—a 10-story monopole with 700+ cubic ft of 12 bulky antennas—will extend 20 feet above the tree line, towering over George Christopher Playground & Glen Canyon, visible throughout the neighborhood.
It does not comply with CEQA: it is not a "small addition to an existing structure" but a "new" massive structure.
Planning Resolution 14182 gives preference to antennas placed "on publicly used structures," yet this is not "on" the Police Academy building but in a parking area behind it.
SF has only 4 wireless structures over 100 ft: 2 attached to commercial buildings downtown, 1 in Presidio Sports Basement lot, 1 at Balboa BART. Other "exemptions" cited by Planning & AT&T (80-93 feet) are near freeways or industrial areas. Two park structures not in residential neighborhoods (40-60 feet) are in Golden Gate Park soccer fields and Palace of Fine Arts with fewer antennas. NO free-standing towers of this size exist in residential neighborhoods next to parks. CUA Approval sets dangerous precedent.
Diamond Heights' "modernist" architecture is eligible for historic status, designed to blend with nature and preserve views. Families, naturalists and hikers want to enjoy trees and sky without a giant tower in the sky that's painted brown to "blend in."
Glen Canyon is a SF "significant natural area" with biodiversity-supporting birds nesting around the Police Academy. Bird-tower collisions are documented. The tower 20' above trees will interfere with bird navigation especially in fog and wind, causing bird deaths in this critical urban wildlife habitat.
The Fire Chief described the canyon as having "Wildfire Interface Area characteristics"—dry grass, windy canyon, red flag warnings. A telecom wildfire consultant identified this as a fire threat. Examples: AT&T is a named defendant in the 2025 Palisades Fire & partially responsible for Malibu Canyon Fire and other incidents. All met safety codes. Cell tower fires are electrical,
requiring power-down before applying water while fire spreads to homes, nursery schools & parks. AT&T states no evidence of fire danger & it will comply with codes.
The project sits 50 feet from SF landslide seismic hazard zone on 30-60 ft of infill. The tower's weight increases landslide risk in this high-soil-saturation area. El Niño rains & tree loss compound erosion and instability.
AT&T claims all locations were exhausted, which is false. There are no documented "coverage gaps" only "areas of relatively weak signal." Less intrusive alternatives exist; other carriers provide coverage without such towers.
AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Mary Foley
963 Duncan St San Francisco, CA 94131-1800

maryfoleyrn@att.net

From: anthonyramirez2@everyactioncustom.com on behalf of Anthony Ramirez
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Thursday, February 5, 2026 1:21:43 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

We have been residents and pioneers in Diamond Heights since1969. Thoughts our efforts, and the generosity of the Haas family the Haas Playground and Dog Park were preserved from commercial development, and have been available to ours and the succeeding generations who have lived here. Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
This MacroTower is only "necessary, desirable and compatible with the neighborhood" according to AT&T & their business goals. Neighbors and visitors disagree. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.
AT&T stated in Dec ‘25 FCC filings: "AT&T will continue to require additional macro facilities to densify its wireless networks. And it will require additional macro facilities to meet public safety needs, as directed by The First Responder Network Authority (FirstNet)."
4 of 7 Planning Commissioners approved the project based on AT&T's false claim that this massive tower is essential for 911 service and First Responders' FirstNet access. According to Police and Fire, their First Responders are not required to use FirstNet and 911 calls go to the nearest carrier.
The proposed structure—a 10-story monopole with 700+ cubic ft of 12 bulky antennas—will extend 20 feet above the tree line, towering over George Christopher Playground & Glen Canyon, visible throughout the neighborhood.
It does not comply with CEQA: it is not a "small addition to an existing structure" but a "new" massive structure.
Planning Resolution 14182 gives preference to antennas placed "on publicly used structures." This is not "on" the Police Academy building, but its parking lot.
SF has only 4 wireless structures over 100 ft: 2 attached to commercial buildings downtown, 1 in Presidio Sports Basement lot, 1 at Balboa BART. Other "exemptions" cited by Planning & AT&T (80-93 feet) are near freeways or industrial areas. Two park structures not in residential neighborhoods (40-60 feet) are in Golden Gate Park soccer fields and Palace of Fine Arts with fewer antennas. NO free-standing towers of this size exist in residential neighborhoods next to parks. CUA Approval sets dangerous precedent.
Diamond Heights' "modernist" architecture is eligible for historic status, designed to blend with nature and preserve views. Families, naturalists and hikers want to enjoy trees and sky without a giant tower in the sky that’s painted brown to "blend in."
Glen Canyon is a SF "significant natural area" with biodiversity-supporting birds nesting around the Police Academy. Bird-tower collisions are documented. The tower 20' above trees will interfere with bird navigation especially in fog and wind, causing bird deaths in this critical urban wildlife habitat.
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The project sits 50 feet from SF landslide seismic hazard zone on 30-60 ft of infill. The tower's weight increases landslide risk in this high-soil-saturation area. El Niño rains & tree loss compound erosion and instability.
AT&T claims all locations were exhausted, which is false. There are no documented "coverage gaps" only "areas of relatively weak signal." Less intrusive alternatives exist; other carriers provide coverage without such towers.
AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Anthony Ramirez
5541 Diamond Heights Blvd San Francisco, CA 94131-2642
anthonyramirez2@comcast.net

From: emort18@everyactioncustom.com on behalf of Eugene Mortensen
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Thursday, February 5, 2026 12:46:10 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
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AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Eugene Mortensen
380 Eddy St Apt 237 San Francisco, CA 94102-6653

emort18@hotmail.com

From: diane kefauver
To: Lee, Tiff (BOS); Jessica Cen (BOS); Sinn, Andrew (BOS); derek.lee@sfgpv.org
Cc: Board of Supervisors (BOS)
Subject: ATT Tower
Date: Wednesday, February 4, 2026 11:02:32 AM
Attachments: AT&T Tower Letter.pdf

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Sent from my iPhone

February 2, 2026

To: Board of Supervisors
San Francisco City Hall
1 Dr Carlton B Goodlett Pl,
San Francisco, CA 94102

From: Diane Kefauver
1726 Great Highway
San Francisco, CA 94122

Re: Support for CEQA Exemption Appeal (File No. 251094) & CUA Appeal (File No. 251098) – AT&T Tower at 350 Amber Drive

Dear President Mandelman & Members of the Board,

I am writing to express my strong support for the Diamond Heights neighborhood appeals of the Conditional Use Approval and the CEQA exemption granted for the proposed AT&T macro wireless facility at 350 Amber Drive.

I attended the Planning Commission meeting in September in which the Commission voted 4 to 3 to approve the monopole installation. I waited four hours to speak, as did thirty-some others, in opposition to the project. I was appalled that the four commissioners voting yes ignored the public comments and made their decision based on AT&T's faulty FirstNet assertion.

The proposed 104-foot-tall monopole does not meet the basic criteria required for a Conditional Use approval. It is not desirable, not necessary and not compatible with the Diamond Heights neighborhood character. It is clearly inconsistent with the San Francisco General Plan and the intent of its Open Space designation.

The General Plan prioritizes protection of open spaces, preservation of natural vistas, compatibility of new developments with existing neighborhood aesthetics, and minimizing in parks and habitat areas any visual and environmental intrusions. Placing the city's tallest free-standing tower in an Open Space Zone directly at the edge of Glen Canyon violates these principles.

San Francisco has no free-standing wireless tower of comparable height in any residential or open-space district. The only two wireless facilities exceeding 100 feet are attached to buildings in commercial zones. Approving the CEQA exemption would encourage telecommunications carriers to bypass full environmental review by claiming minor-project

exemptions for major new towers. It would undermine San Francisco's long-standing commitment to requiring "least intrusive means" siting.

If the CUA appeal is rejected, given the project's scale, location, unusual circumstances, and precedent-setting implications, the CEQA appeal must be granted and a full Environmental Impact Report required. It is the responsible path forward with a project where significant environmental, visual, and land-use impacts are reasonably foreseeable.

I respectfully urge the Board of Supervisors to approve the CUA appeal and, if rejecting that appeal, to overturn the CEQA exemption and require a full Environmental Impact Report.

Sincerely,

Diane C. Kefauver

Diane Kefauver

From: Lee Abel
To: MandelmanStaff (BOS); Board of Supervisors (BOS)
Subject: DHCA: Monopole appeal
Date: Tuesday, February 3, 2026 1:04:12 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please rethink the 10-story cell phone tower for AT&T on the police academy property. There must be a better way, a less unsightly way, a safer way, a more aesthetic way to provide better cell phone coverage for their customers. Why are you not considering other solutions? I understand that we are a city that needs more house, but we are not a city without technical brains to figure out a safer, less obtrusive way to provide 1 company with options for the cell service needed. Come on San Francisco, resource from those techies that would be happy to be enlisted to help design something better.

Lee Abel
San Francisco

From: Jamie Litchmann
To: Board of Supervisors (BOS)
Subject: AT&T Monopol at 350 Amber Driv e
Date: Wednesday, February 4, 2026 10:44:50 AM

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Board of Supervisors
San Francisco, California

February 4, 2026

RE: PLEASE SUPPORT OUR PLEA!

We in the Diamond Heights and Glen Park neighborhoods are pleading with you to support the DHCA appeals of the CEQA Exemption and the Conditional Use Authorization (CUA) to Overturn Planning Commission approval of the 10-Story Cell Phone Tower in our neighborhood. Our reasons are many:

1. <!--[endif]-->There is NO precedent for locating a tower of this height and mass in a dense residential neighborhood in San Francisco directly adjacent to two parks: George Christopher Playground and Glen Canyon Park

2. <!--[endif]-->This tower is not necessary, desirable, or compatible with our neighborhoods. There are alternatives that would be less intrusive and safer

3. <!--[endif]-->This tower is Detrimental to our neighborhoods' health, safety and welfare.

    <!--[if !supportLists]-->a. <!--[endif]-->It poses an extreme fire danger in Glenn Canyon, due to the storing of a highly flammable diesel fuel as a backup generator to the tower.

    <!--[if !supportLists]-->b. <!--[endif]-->Proposed signage warns of hazardous materials and diesel emissions will be generated when the generator is tested regularly affecting the nearby children at the nursery school.

    <!--[if !supportLists]-->c. <!--[endif]-->Geologic landslide and seismic hazards of the project are just 50-80 feet from a documented landslide/seismic hazard zone. The Police Academy has a history of slippage because of saturated soil.

4. <!--[endif]-->This tower is not consistent with the SF General Plan in that it disregards prioritization of Open Space and Parks nor is it in conformity with zoning district purpose.

5. <!--[endif]-->AT&T in its documents and testimony misled Planning commissioners who voted to

approve the 10-story Macro Tower;

<!--[if !supportLists]-->a. <!--[endif]-->The Commission voted 4 to 3 to approve the tower. The winning majority in favor of the tower based their votes on misinformation emphasized by AT&T that the MACRO Tower was needed for FirstNet emergency communication and a signal coverage gap in Glen Canyon.

<!--[if !supportLists]-->b. <!--[endif]--> **The reality:** San Francisco Police & Fire Departments do not require their officers and first responders to subscribe to or use FirstNet. If in the future there was a decision by Police and/or Fire to make FirstNet mandatory, a small cell antenna network or FirstNet phone boosters are available to be used in areas like Glen Canyon and old concrete and steel buildings like the Diamond Heights Safeway. A Macro Tower is not required to strengthen AT&T signal in the neighborhood.

Please, as representatives of the people who voted you into your position of responsibility and representation, we urge you to support our appeal and deny AT&T approval for building this tower.,

Sincerely,

James Litchmann

130 Amber Drive

San Francisco, California 94131

Jamie Litchmann
jamie_litchmann@me.com
https://url.avanan.click/v2/r01/___https://www.jamielitchmann.com___.YXAzOnNmZHQyOmE6bzoyMjIzZmZlYzcxY2QyZjI4ZTM3N2I5MDkyZjY1MjM1YTo3OjVkMzU6ZmRlMTNjNDk2YWY0ODRhMzkyNTVjNDE2ZTQ4M2U1MzFkNTZjYTljYTlkNWZkZmZmMTUzYjMzZGMxOWMyMTcwMjp0OlQ6Tg

From:	Betsy Eddy
To:	Mandelman, Rafael (BOS); Board of Supervisors (BOS)
Cc:	Ho, Calvin (BOS); MandelmanStaff (BOS); Daniel Schereck; Catherine Dodd; Tim Wolfred
Subject:	RE: Request for Support of DHCA Appeals #251094 for CEQA and #251098 for (CUA) 350 Amber Drive
Date:	Monday, February 2, 2026 6:29:15 PM
Attachments:	Appeal Mandelman letter Betsy Eddy 2-2-26.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board President Mandelman and Members of the Board of Supervisors,

Please give careful consideration to my attached letter requesting your support for the Diamond Heights Community Association Appeals to be heard on February 10th before the Board of Supervisors so that the Planning Commissioners' approval of the 10-story cell phone tower proposed by AT&T on SF Police Academy property will be overturned.

My letter lists reasons that are not considerations for your vote. It also provides the reasons to base your vote on our detailed Board packet that states that the AT&T proposal is not necessary and desirable and is not compatible with the neighborhood of Diamond Heights. *The CEQA & CUA Appeal: AT&T Macro Tower at 350 Amber Drive 251094 & 251098 Hearing Feb 10, 2026* will be emailed to you separately.

Board Secretary, please add this letter to the Board of Supervisors packet/docket for the Appeals Hearing on February 10th.

In gratitude for your service for all San Francisco residents.

Respectfully,

Betsy Eddy

Betsy Eddy
14 Farnum Street
San Francisco, CA 94131
415-867-5774

February 2, 2026

Board President Rafael Mandelman
San Francisco City Hall
1 Dr. Carlton P Goodlett Place
San Francisco CA 94102

RE: Request for Support of DHCA Appeals #251094 for CEQA and #251098 for (CUA) 350 Amber Drive

Dear Board President Mandelman,

I am urge you to support the DHCA Appeals to be heard on February 10th before the Board of Supervisors so that the Planning Commissioners' approval of the 10-story cell phone tower proposed by AT&T on SF Police Academy property will be overturned.

These concerns should not influence your vote but need to be said:

- AT&T will probably sue the City. Even though this should not be a consideration for your vote, 2 lawyers said that if AT&T wins, it would not be awarded damages but would get its permit. The costs to the City would be those for fighting the lawsuit. At the GPA meeting before you arrived, I asked City Attorney Chiu in his Q and A with the group: What would you say to Supervisors that ask you about the good possibility that AT&T will sue the City if its approval is denied? Attorney Chiu said that he trusts the Board of Supervisors and if they support the appeals to overturn the Planning Commission's approval, he will fight the case. He said it would be a difficult lawsuit since Telecom has changed Federal and State laws for its advantage.
- The emotional appeal: our group opposes AT&T making millions using public land.
- The fact that in 2024, AT&T was awarded a Department of Homeland Security $147 Million dollar contract to provide ICE with communication capabilities and an additional $11 million for data analytics in support of ICE services identifying and processing undocumented immigrants.

Please vote based on whether the 10-story cell tower would be necessary, desirable and compatible with the neighborhood as described in Planning and San Francisco General Plan codes. In the transcription of the Planning Commission approval on Sept. 25, 2025, COMMISSIONER VICE PRESIDENT MOORE (said) I WOULD LIKE TO

REMIND US THAT THE APPROVAL FOR THE AT&T INSTALLATION FALLS UNDER A CONDITIONAL USE AUTHORIZATION … WHICH REQUIRES A HIGH BAR THAT SOMETHING IS NECESSARY AND DESIRABLE.

Our opposition group, legal, and expert statements will confirm in detailed descriptions of codes pertinent to the macro tower, that the Planning Commission did not base its vote for approval of CEQA and CUA on Planning and San Francisco General Plan codes. The Planning Commissioners based their vote for approval on the need for first responders to have FirstNet on their phones as supported in a letter from Sheriff Miyamoto. Board President Lydia So read the letter just as Commissioner Braun was leaning toward a No vote. After the reading, the Commissioners based their 4-3 vote for approval on the need for emergency calls using FirstNet, an AT&T product. In a DHCA Community Meeting on October 15th, both Fire Chief Dan Crispen and Ingleside SFPD Captain Gerald Newbeck said that FirstNet was not mandatory for firefighters and police officers. Both said that 911 calls in Diamond Heights from any cell phone company would reach 911 dispatch.

The 10-story cell tower is not necessary: Thank you for arranging the meeting with AT&T staff and our opposition group on November 18, 2025. You asked AT&T in trying to reach a compromise – what can there be in the middle of AT&T plans and alternatives? Can't plans be tweaked? Cammy Blackstone, AT&T, said no to anything but the 10-story cell tower. AT&T refuses to consider other alternatives that are safer, better-engineered, solutions. These solutions are being overlooked due to industry expansion strategies. Ms. Blackstone said any other solution would not meet AT&T's business goals. AT&T recently supported the current federal administrations regulatory efforts to eliminate all local control over wireless facilities. They singled out SF's EMF measurement requirements and requirements that a plan for antenna placement be updated every 2 years in their comments as barrier to business. AT&T said eliminating local control will allow them to densify their macro tower networks.

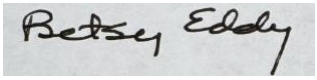
The 10-story cell tower is not desirable: The 10-story tower would have too many risks for fire, safety, impacts on wildlife and flora, loss of home values, etc. Thank you for arranging the meeting with DBI on December 2, 2025. You made a good point that AT&T has the funds to do whatever DBI requires to anchor a tower that may weigh up to 10 tons next to a seismic hazard ridge to not collapse in an earthquake. AT&T's vast resources cannot make the proposed tower fireproof. You know about Diamond Heights' fire concerns since you convened a Town Hall on Fire Danger in our Neighborhood Parks with Resilient Diamond Heights in 2018. On a windy day, it would take just one tree branch striking the electrical equipment to spark a fire that could spread quickly to Diamond Heights, Glen Park, and Miraloma Park. The SFFD would have to wait up to an hour for the telecom equipment to de-generize before fighting the fire in the equipment.

- **The 10-story cell tower is not compatible with the neighborhood:** In a small residential neighborhood with mostly RH-1 (single-family) and a height limit of 40',

the unsightly 104’ tower would impair views that were created by the former San Francisco Redevelopment Agency to blend housing and nature. The Planning Dept. had an intern do a historic context statement in 2018 which is a precursor to creating a Historic District in Diamond Heights.

The proposed 10-Story cell tower is not necessary, desirable or compatible with the neighborhood. Please continue your legacy of concern and action for Diamond Heights residents by voting to support the DHCA Appeals so that the Planning Commission approval is overturned.

Best regards,



Betsy Eddy
Immediate Past President, Diamond Heights Community Association
Coordinator Resilient Diamond Heights
Coordinator Diamond Heights Blvd. Median Project

Cc: Calvin Ho
Mandelman Staff
Board of Supervisors

From: Holley N
To: Board of Supervisors (BOS)
Subject: Appeal #251094 for CEQA and #251098 for Conditional Use Authorization (CUA)
Date: Friday, January 30, 2026 12:57:48 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors,
I am writing to you today to **urge you to SUPPORT- 251094 - Appeal CEQA Class 3 Exemption and overturn the Planning Commission approval of the tower.**
I am very concerned about AT&T's proposed monopole in Christopher Park. I support the Diamond Heights neighbors' legitimate environmental and safety concerns.
Please grant approval of the appeal # 251094 for CEQA exemption and # 251098 for CUA for ATT's proposed 104-foot wireless facility.
The massive 10-story pole on a 500 sq ft pad & topped with bulky electric antennas towering over Christopher Park and Glen Canyon - visible to residents throughout the neighborhood. **The CEQA application does not include the 700+ cubic foot antenna array 20 ft above the trees.**

This is not a "small addition to an existing structure." SF has only 3 wireless antenna structures over 100 ft high: 2 are in commercial zones attached to buildings & the 3rd is in the parking lot of Sports Basement. Planning and ATT cite other (less tall) structures with CEQA exemptions—all near freeways or in industrial areas. **There are NO free-standing towers of this height or bulk in residential neighborhoods or next to parks.**

Location and unusual circumstances were not considered: the critical natural resource of Glen Canyon, history of seismic landslide failures on the site, and high fire potential in the park & surrounding neighborhood.

The site is on the Glen Canyon property line 50 feet from a SF landslide seismic hazard zone and on the edge of the Canyon—described by Fire Chief Crispen as a SF Urban Wildfire Interface Area. It is one of the windiest neighborhoods with red flag warnings last year. A national telecom wildfire consultant stated this location is a real fire threat, yet Planning and ATT said there is no evidence of fire danger. Consider: ATT named defendant in 2025 Palisades Fire, ATT tower fire (electrical arcing) on school campus 6-16-2015, 3-9-21 smoldering steel tower collapsed on school bleachers - Chula Vista, 2007 ATT partly responsible for Malibu Canyon Fire. Cell tower fires are electrical and can't be extinguished until grid is cut—this can take hours while fire spreads to homes, nursery schools, playground and shopping center with no time to escape.

The location is on 30-60 ft of infill. According to USGS, excavation and the tower's weight will increase landslide risk in this high-soil-saturation area. Heavy rainfall and anticipated tree loss on the steep hillside will accelerate erosion and instability, as will an earthquake.

The Canyon is designated as a significant natural area & a critical urban wildlife habitat with fragile biodiversity-supporting native grasses and sensitive bird species that move throughout the area. The forest and brush are an essential ecosystem. Tower construction will damage this sensitive environment and disrupt wildlife corridors (as will fire or landslide). **A certified arborist stated digging for the pole will likely damage roots and kill trees (adding to landslide & fire risk).** Additional danger is regular required testing of the 150-gallon fuel storage tank, will create air quality hazards for children at nearby nursery schools & Christopher Playground. The neighborhood is an Historic Resource—most homes are over 50 years old and examples of "modernist" architecture designed to blend with the natural environment preserving views of open space. SF Planning Dept began an application for historic status.

ATT falsely claimed this tower is essential for 911 service and First Responder FirstNet access. 911 calls go to the closest carrier and **according to Police and Fire Chief Crispen, First Responders are not required to use FirstNet. ATT misled Planning Commissioners to gain approval and four voted on that basis. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.**

ATT customers want good wireless service. The FCC requires the least intrusive structures. **Less intrusive alternatives exist** for customers in the targeted area where other carriers provide coverage without such intrusive towers.

Massive structures like this do not belong adjacent to parks, playgrounds, and homes. I urge you to grant the appeal of the CEQA exemption.

Sincerely,
Holley Newmark
970 Duncan St
San Francisco, CA 94131-1870
hgreenstein@comcast.net

From: Perry Tom
To: Board of Supervisors (BOS)
Subject: Opposition to 10 story cell phone tower
Date: Sunday, February 1, 2026 8:57:55 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors,

I am writing to you to express my opposition to the proposed building of the 10 -story cell phone tower on the Police Academy property in San Francisco.

The appeal numbers are #251094 for CEQA exemption and #251098 Conditional Use Authorization.

The reason for my opposition includes fire risks, noise from the generators, aesthetics, increased insurance costs, decreased in home values, and possible harm to birds, animals, and flora.

T-Mobile and Verizon have good cell phone coverage in Diamond Heights without 10 story towers. There are other significant alternatives that could be used by AT &T such as distributed antenna systems (DAS) or other better engineered solutions.

Your opposition to the building of the 10-story cell phone tower on the Police Academy property in San Francisco would be greatly appreciated.

Yours truly,

Perry Tom

From: penamichelled@everyactioncustom.com on behalf of Michelle Pena
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Wednesday, February 4, 2026 12:03:30 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
This MacroTower is only "necessary, desirable and compatible with the neighborhood" according to AT&T & their business goals. Neighbors and visitors disagree. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.
AT&T stated in Dec '25 FCC filings: "AT&T will continue to require additional macro facilities to densify its wireless networks. And it will require additional macro facilities to meet public safety needs, as directed by The First Responder Network Authority (FirstNet)."
4 of 7 Planning Commissioners approved the project based on AT&T's false claim that this massive tower is essential for 911 service and First Responders' FirstNet access. According to Police and Fire, their First Responders are not required to use FirstNet and 911 calls go to the nearest carrier.
The proposed structure—a 10-story monopole with 700+ cubic ft of 12 bulky antennas—will extend 20 feet above the tree line, towering over George Christopher Playground & Glen Canyon, visible throughout the neighborhood.
It does not comply with CEQA: it is not a "small addition to an existing structure" but a "new" massive structure.
Planning Resolution 14182 gives preference to antennas placed "on publicly used structures," yet this is not "on" the Police Academy building but in a parking area behind it.
SF has only 4 wireless structures over 100 ft: 2 attached to commercial buildings downtown, 1 in Presidio Sports Basement lot, 1 at Balboa BART. Other "exemptions" cited by Planning & AT&T (80-93 feet) are near freeways or industrial areas. Two park structures not in residential neighborhoods (40-60 feet) are in Golden Gate Park soccer fields and Palace of Fine Arts with fewer antennas. NO free-standing towers of this size exist in residential neighborhoods next to parks. CUA Approval sets dangerous precedent.
Diamond Heights' "modernist" architecture is eligible for historic status, designed to blend with nature and preserve views. Families, naturalists and hikers want to enjoy trees and sky without a giant tower in the sky that's painted brown to "blend in."
Glen Canyon is a SF "significant natural area" with biodiversity-supporting birds nesting around the Police Academy. Bird-tower collisions are documented. The tower 20' above trees will interfere with bird navigation especially in fog and wind, causing bird deaths in this critical urban wildlife habitat.
The Fire Chief described the canyon as having "Wildfire Interface Area characteristics"—dry grass, windy canyon, red flag warnings. A telecom wildfire consultant identified this as a fire threat. Examples: AT&T is a named defendant in the 2025 Palisades Fire & partially responsible for Malibu Canyon Fire and other incidents. All met safety codes. Cell tower fires are electrical,
requiring power-down before applying water while fire spreads to homes, nursery schools & parks. AT&T states no evidence of fire danger & it will comply with codes.
The project sits 50 feet from SF landslide seismic hazard zone on 30-60 ft of infill. The tower's weight increases landslide risk in this high-soil-saturation area. El Niño rains & tree loss compound erosion and instability.
AT&T claims all locations were exhausted, which is false. There are no documented "coverage gaps" only "areas of relatively weak signal." Less intrusive alternatives exist; other carriers provide coverage without such towers.
AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Michelle Pena
4079 B 18th St San Francisco, CA 94114-2535

penamichelled@gmail.com

From: truthripples@everyactioncustom.com on behalf of Marie Tieu
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Tuesday, February 3, 2026 10:42:43 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
This MacroTower is only "necessary, desirable and compatible with the neighborhood" according to AT&T & their business goals. Neighbors and visitors disagree. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.
AT&T stated in Dec '25 FCC filings: "AT&T will continue to require additional macro facilities to densify its wireless networks. And it will require additional macro facilities to meet public safety needs, as directed by The First Responder Network Authority (FirstNet)."
4 of 7 Planning Commissioners approved the project based on AT&T's false claim that this massive tower is essential for 911 service and First Responders' FirstNet access. According to Police and Fire, their First Responders are not required to use FirstNet and 911 calls go to the nearest carrier.
The proposed structure—a 10-story monopole with 700+ cubic ft of 12 bulky antennas—will extend 20 feet above the tree line, towering over George Christopher Playground & Glen Canyon, visible throughout the neighborhood.
It does not comply with CEQA: it is not a "small addition to an existing structure" but a "new" massive structure.
Planning Resolution 14182 gives preference to antennas placed "on publicly used structures," yet this is not "on" the Police Academy building but in a parking area behind it.
SF has only 4 wireless structures over 100 ft: 2 attached to commercial buildings downtown, 1 in Presidio Sports Basement lot, 1 at Balboa BART. Other "exemptions" cited by Planning & AT&T (80-93 feet) are near freeways or industrial areas. Two park structures not in residential neighborhoods (40-60 feet) are in Golden Gate Park soccer fields and Palace of Fine Arts with fewer antennas. NO free-standing towers of this size exist in residential neighborhoods next to parks. CUA Approval sets dangerous precedent.
Diamond Heights' "modernist" architecture is eligible for historic status, designed to blend with nature and preserve views. Families, naturalists and hikers want to enjoy trees and sky without a giant tower in the sky that's painted brown to "blend in."
Glen Canyon is a SF "significant natural area" with biodiversity-supporting birds nesting around the Police Academy. Bird-tower collisions are documented. The tower 20' above trees will interfere with bird navigation especially in fog and wind, causing bird deaths in this critical urban wildlife habitat.
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requiring power-down before applying water while fire spreads to homes, nursery schools & parks. AT&T states no evidence of fire danger & it will comply with codes.
The project sits 50 feet from SF landslide seismic hazard zone on 30-60 ft of infill. The tower's weight increases landslide risk in this high-soil-saturation area. El Niño rains & tree loss compound erosion and instability.
AT&T claims all locations were exhausted, which is false. There are no documented "coverage gaps" only "areas of relatively weak signal." Less intrusive alternatives exist; other carriers provide coverage without such towers.
AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Marie Tieu
6210 Fulton St Apt A San Francisco, CA 94121-3426

truthripples@protonmail.com

From: barbara.burgel@everyactioncustom.com on behalf of Barbara Burgel
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Wednesday, February 4, 2026 12:00:39 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
This MacroTower is only "necessary, desirable and compatible with the neighborhood" according to AT&T & their business goals. Neighbors and visitors disagree. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.
AT&T stated in Dec '25 FCC filings: "AT&T will continue to require additional macro facilities to densify its wireless networks. And it will require additional macro facilities to meet public safety needs, as directed by The First Responder Network Authority (FirstNet)."
4 of 7 Planning Commissioners approved the project based on AT&T's false claim that this massive tower is essential for 911 service and First Responders' FirstNet access. According to Police and Fire, their First Responders are not required to use FirstNet and 911 calls go to the nearest carrier.
The proposed structure—a 10-story monopole with 700+ cubic ft of 12 bulky antennas—will extend 20 feet above the tree line, towering over George Christopher Playground & Glen Canyon, visible throughout the neighborhood.
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Diamond Heights' "modernist" architecture is eligible for historic status, designed to blend with nature and preserve views. Families, naturalists and hikers want to enjoy trees and sky without a giant tower in the sky that's painted brown to "blend in."
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AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Barbara Burgel
312 Edna St San Francisco, CA 94112-1325

barbara.burgel@gmail.com

From: wsmiller8@everyactioncustom.com on behalf of Whitney Miller
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Tuesday, February 3, 2026 9:22:46 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
This MacroTower is only "necessary, desirable and compatible with the neighborhood" according to AT&T & their business goals. Neighbors and visitors disagree. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.
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AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Whitney Miller
64 Crags Ct San Francisco, CA 94131-2522

wsmiller8@gmail.com

From: bonni.evensen@everyactioncustom.com on behalf of Bonni Evensen
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Monday, February 2, 2026 8:57:01 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098
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Diamond Heights' "modernist" architecture is eligible for historic status, designed to blend with nature and preserve views. Families, naturalists and hikers want to enjoy trees and sky without a giant tower in the sky that’s painted brown to "blend in."
Glen Canyon is a SF "significant natural area" with biodiversity-supporting birds nesting around the Police Academy. Bird-tower collisions are documented. The tower 20' above trees will interfere with bird navigation especially in fog and wind, causing bird deaths in this critical urban wildlife habitat.
The Fire Chief described the canyon as having "Wildfire Interface Area characteristics"—dry grass, windy canyon, red flag warnings. A telecom wildfire consultant identified this as a fire threat. Examples: AT&T is a named defendant in the 2025 Palisades Fire & partially responsible for Malibu Canyon Fire and other incidents. All met safety codes. Cell tower fires are electrical,
requiring power-down before applying water while fire spreads to homes, nursery schools & parks. AT&T states no evidence of fire danger & it will comply with codes.
The project sits 50 feet from SF landslide seismic hazard zone on 30-60 ft of infill. The tower's weight increases landslide risk in this high-soil-saturation area. El Niño rains & tree loss compound erosion and instability.
AT&T claims all locations were exhausted, which is false. There are no documented "coverage gaps" only "areas of relatively weak signal." Less intrusive alternatives exist; other carriers provide coverage without such towers.
AT&T wants market-share regardless of neighborhood concerns.
Massive profit-making towers do not belong on public property surrounded by dense housing and parks.
I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Bonni Evensen
665 Connecticut St San Francisco, CA 94107-2834

bonni.evensen@gmail.com

From: rheanna.bates@everyactioncustom.com on behalf of Rheanna Bates
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Monday, February 2, 2026 8:52:38 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Please grant the Appeal Conditional Use Authorization approval at 350 Amber Dr - File No. C251098

As a resident of Diamond Heights and someone whose home is located close to the proposed MacroTower, I oppose the MacroTower because of its risks to our neighborhood's safety, property values, and aesthetics, as well as potential harms to our environment and wildlife.

This MacroTower is only "necessary, desirable and compatible with the neighborhood" according to AT&T & their business goals. Neighbors and visitors disagree. Allowing this "exemption" sets a dangerous precedent for all neighborhoods.
AT&T stated in Dec ‘25 FCC filings: "AT&T will continue to require additional macro facilities to densify its wireless networks. And it will require additional macro facilities to meet public safety needs, as directed by The First Responder Network Authority (FirstNet)."

4 of 7 Planning Commissioners approved the project based on AT&T's false claim that this massive tower is essential for 911 service and First Responders' FirstNet access. According to Police and Fire, their First Responders are not required to use FirstNet and 911 calls go to the nearest carrier.

The proposed structure—a 10-story monopole with 700+ cubic ft of 12 bulky antennas—will extend 20 feet above the tree line, towering over George Christopher Playground & Glen Canyon, visible throughout the neighborhood. It does not comply with CEQA: it is not a "small addition to an existing structure" but a "new" massive structure. Planning Resolution 14182 gives preference to antennas placed "on publicly used structures," yet this is not "on" the Police Academy building but in a parking area behind it.

SF has only 4 wireless structures over 100 ft: 2 attached to commercial buildings downtown, 1 in Presidio Sports Basement lot, 1 at Balboa BART. Other "exemptions" cited by Planning & AT&T (80-93 feet) are near freeways or industrial areas. Two park structures not in residential neighborhoods (40-60 feet) are in Golden Gate Park soccer fields and Palace of Fine Arts with fewer antennas. NO free-standing towers of this size exist in residential neighborhoods next to parks. CUA Approval sets dangerous precedent.
Diamond Heights' "modernist" architecture is eligible for historic status, designed to blend with nature and preserve views. Families, naturalists and hikers want to enjoy trees and sky without a giant tower in the sky that’s painted brown to "blend in."
Glen Canyon is a SF "significant natural area" with biodiversity-supporting birds nesting around the Police Academy. Bird-tower collisions are documented. The tower 20' above trees will interfere with bird navigation especially in fog and wind, causing bird deaths in this critical urban wildlife habitat.

The Fire Chief described the canyon as having "Wildfire Interface Area characteristics"—dry grass, windy canyon, red flag warnings. A telecom wildfire consultant identified this as a fire threat. Examples: AT&T is a named defendant in the 2025 Palisades Fire & partially responsible for Malibu Canyon Fire and other incidents. All met safety codes. Cell tower fires are electrical,
requiring power-down before applying water while fire spreads to homes, nursery schools & parks. AT&T states no evidence of fire danger & it will comply with codes.

The project sits 50 feet from SF landslide seismic hazard zone on 30-60 ft of infill. The tower's weight increases

landslide risk in this high-soil-saturation area. El Niño rains & tree loss compound erosion and instability.

AT&T claims all locations were exhausted, which is false. There are no documented "coverage gaps" only "areas of relatively weak signal." Less intrusive alternatives exist; other carriers provide coverage without such towers. AT&T wants market-share regardless of neighborhood concerns.

Massive profit-making towers do not belong on public property surrounded by dense housing and parks.

I urge you to grant the appeal of the Conditional Use Authorization.

Sincerely,
Rheanna Bates
255 Red Rock Way San Francisco, CA 94131-1779
rheanna.bates@gmail.com

From:	Board of Supervisors (BOS)
To:	BOS-Supervisors; BOS-Legislative Aides
Cc:	Calvillo, Angela (BOS); Somera, Alisa (BOS); Ng, Wilson (BOS); De Asis, Edward (BOS); Mchugh, Eileen (BOS); BOS-Operations; BOS Legislation, (BOS)
Subject:	FW: Opposition to Diamond Heights Cell Tower
Date:	Thursday, January 22, 2026 3:50:13 PM

Hello,

Please see below for communication from Evelyn Graham regarding File No. 251098.

> **File No. 251098:** Hearing of persons interested in or objecting to the approval of a Conditional Use Authorization pursuant to Planning Code, Sections 209.2, 303, and 304 for a proposed project at 350 Amber Drive (Assessor's Parcel Block No. 7521, Lot No. 005) identified in Planning Case No. 2024-004318CUA, issued by the Planning Commission by Motion No. 21825, dated September 25, 2025, to install a new AT&T Macro Wireless Telecommunications Facility on an approximately 104 foot tall monopole, consisting of 12 new antennas, and nine new remote radio units and ancillary equipment within the P (Public) Zoning District and OS (Open Space) Height and Bulk District. (District 8) (Appellant: Mitchell M. Tsai of Mitchell M. Tsai Law Firm on behalf of the Diamond Heights Community Association) (Filed October 27, 2025)

Sincerely,

Joe Adkins
Office of the Clerk of the Board
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
Phone: (415) 554-5184 | Fax: (415) 554-5163
board.of.supervisors@sfgov.org | www.sfbos.org

From: evelynG@mail.com <evelynG@mail.com>
Sent: Tuesday, January 13, 2026 12:16 PM
To: Board of Supervisors (BOS) <board.of.supervisors@sfgov.org>
Subject: Opposition to Diamond Heights Cell Tower

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

This is an ugly stain on the Diamond Heights neighbors!

Evelyn Graham
SF Resident since 1988

From: chrisanne.bradley@everyactioncustom.com on behalf of Chrisanne Bradley
To: BOS Legislation, (BOS)
Subject: I am writing to you today to urge you to please support Appeal File #C251098 - Conditional Use Authorization
Date: Tuesday, January 13, 2026 1:36:29 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Legislative Services,

Hello, please Support the Appeal File #C251098!

I urge you and the Board of Supervisors to support this appeal and overturn the Planning Commission's approval of ATT's proposed 10-story antenna structure in Diamond Heights. This massive tower would be constructed in open space at the forested property boundary of Glen Canyon and Christopher Playground as the FIRST free-standing tower over 100' tall in a San Francisco residential neighborhood next to 2 parks. All towers of this size are located in commercial or industrial areas and along 101 or 280 freeways.

This neighborhood was intentionally designed with low-profile buildings and underground wires to preserve views of the sky and natural areas. Please preserve this urban oasis and beautiful public open space.

There was misleading information sent to 4 of the 7 Planning Commissioners that were influenced by claims that ATT's FirstNet "wireless service" is required for first responders, and this tower is necessary for emergency communications. SFPD and SFFD departments do NOT require their first responders to use FirstNet, and, signal-boosting equipment exists for that purpose if and when needed.
Other local carriers provide sufficient signal strength without giant towers. The massive scale contradicts neighborhood character & four-story zoning.

False Statements in Executive Summary: "The facility is situated to avoid intrusion into public vistas and ensure harmony with existing neighborhood character."

Reality: The tower with its bulky antenna array 20 feet above trees will be highly visible from Glen Canyon, Tower over Christopher Playground, Blight skyline and tree line views from surrounding homes and streets and disrupt the visual harmony that makes the neighborhood unique.

Safety concerns and Fire Danger: Located at the top of Glen Canyon, Fire Chief Crispen described the grassy canyon as having Wildfire Urban Interface Area characteristics. Telecom facilities have caused fires in California & across the country. (e.g. ATT named defendant in 2025 Palisades Fire, Chula Vista 2021-AT&T tower fire (electrical) on school campus-smoldering steel tower collapsed on bleachers, AT&T partly responsible for 2007 Malibu Canyon Fire).

Economic Impact: Published research and local realtors confirm this tower will decrease surrounding property values AND increase homeowners insurance costs due to fire hazard, affecting rents, neighborhood financing, marketability, and shopping center customer base.

NOTE: ATT refused to consider less intrusive alternatives and would not rule out adding more antennas later. ATT changed the fuel tank from 190 to 150 gallons to avoid BAAQD requirements. Verizon and T-Mobile have excellent coverage in the area and do not require a massive tower!

Access to nature and preservation of park views are fundamental to Diamond Heights' character and residents' quality of life. This industrial electrical structure rising above trees would permanently damage what the community values most. I recommend that ATT identify an appropriate commercial/industrial location or deploy less intrusive, more modern technology that doesn't sacrifice neighborhood aesthetics, safety, and property values.

Please grant this appeal and thanks for all of your support to preserve this unique urban oasis for all of SF residents to enjoy!

Sincerely,
Chrisanne Bradley
25 Crags Ct San Francisco, CA 94131-2521
chrisanne.bradley@gmail.com

From:	Board of Supervisors (BOS)
To:	BOS-Supervisors; BOS-Legislative Aides
Cc:	Calvillo, Angela (BOS); BOS-Operations; BOS Legislation, (BOS)
Subject:	FW: Oppose the proposed 104' ATT antenna
Date:	Tuesday, December 30, 2025 9:08:20 AM

Hello,

Please see below communication regarding **File No. 251098:**

Hearing of persons interested in or objecting to the approval of a Conditional Use Authorization pursuant to Planning Code, Sections 209.2, 303, and 304 for a proposed project at 350 Amber Drive (Assessor's Parcel Block No. 7521, Lot No. 005) identified in Planning Case No. 2024-004318CUA, issued by the Planning Commission by Motion No. 21825, dated September 25, 2025, to install a new AT&T Macro Wireless Telecommunications Facility on an approximately 104 foot tall monopole, consisting of 12 new antennas, and nine new remote radio units and ancillary equipment within the P (Public) Zoning District and OS (Open Space) Height and Bulk District. (District 8) (Appellant: Mitchell M. Tsai of Mitchell M. Tsai Law Firm on behalf of the Diamond Heights Community Association) (Filed October 27, 2025).

Regards,

John Bullock
Office of the Clerk of the Board
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
(415) 554-5184
BOS@sfgov.org | www.sfbos.org

Disclosures: *Personal information that is provided in communications to the Board of Supervisors is subject to disclosure under the California Public Records Act and the San Francisco Sunshine Ordinance. Personal information provided will not be redacted. Members of the public are not required to provide personal identifying information when they communicate with the Board of Supervisors and its committees. All written or oral communications that members of the public submit to the Clerk's Office regarding pending legislation or hearings will be made available to all members of the public for inspection and copying. The Clerk's Office does not redact any information from these submissions. This means that personal information—including names, phone numbers, addresses and similar information that a member of the public elects to submit to the Board and its committees—may appear on the Board of Supervisors website or in other public documents that members of the public may inspect or copy.*

From: Linda Ahuatzin <lindahernandez650@gmail.com>
Sent: Tuesday, December 23, 2025 6:31 PM

To: Board of Supervisors (BOS) <board.of.supervisors@sfgov.org>
Subject: Oppose the proposed 104’ ATT antenna

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I wanted to oppose the proposal of an antenna at 305 Amber St in San Francisco as it’s can if the future cause a wildfire. If any questions please contact me. Thank you for your time

Linda Ahuatzin

From: Barbara Mann
To: Board of Supervisors (BOS)
Subject: AT&T antenna fire hazard
Date: Sunday, December 7, 2025 10:46:05 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,

NONE of this makes sense… This huge AT&T antenna is dangerous. please do Not let this be built.

this is a disaster in the making… please do not let this happen.

Sincerely,

Barbara Mann

From: Don Lapin
To: Board of Supervisors (BOS)
Subject: Public Hearing Dec. 9 / 350 Amber Dr Cell Tower
Date: Friday, December 5, 2025 1:24:56 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the Board of Supervisors,

As a resident of Diamond Heights/Goldmine Hill, I would like to express my views to the Board concerning the proposed installation of a 100-foot AT&T cell tower in our neighborhood.

I was an AT&T customer when I moved here in 1997, but their cell service was essentially unusable in Diamond Heights, and I switched to Verizon. So in general it does seem to be a good idea for AT&T to upgrade their service up here.

However, I question the approach that they have taken.

If you look at the SF Planning Commission map of wireless facility locations (https://sfplanninggis.org/wireless/), you may notice that both T-Mobile and Verizon have cell antenna locations along Diamond Heights Blvd. Yet neither company has found it necessary to erect a 100-foot monopole to provide this service. I have driven past these locations countless times, and have never seen either antenna.

So why should it be necessary for AT&T to erect such a large monstrosity in our neighborhood, and particularly adjacent to public parklands? It does not seem to be in keeping with the low-rise tenor of the area. Such an installation might also persuade competitors to request tall towers, both in our neighborhood and beyond, potentially resulting in a diminished skyline for the city at large.

I also understand that AT&T was able to persuade wavering members of the Planning Commission by claiming that without their approval of the monopole tower, the AT&T FirstNet emergency broadband network would be unavailable. The company representatives neglected to mention, however, that San Francisco has its own emergency network already, with antennas located on Twin Peaks.

My recommendation to the Board would be to overrule the Planning Commission on its approval of the AT&T monopole cell tower. Instead, urge the company to build out its infrastructure in a manner similar to its competitors, i.e., smaller antennas like the ones Verizon and T-Mobile use in our neighborhood.

Thank you,

Don Lapin

From: fiscal.obscure1r@icloud.com
To: BOS Legislation, (BOS)
Subject: Opposition letter to cell tower at 350 amber drive
Date: Monday, December 8, 2025 12:20:17 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing as a resident of Diamond heights village on Duncan. For many years, living near Christopher playground and Glen canyon park has been a beautiful respite to the hustle and bustle of the city. The open and safe spaces are truly hidden gem within San Francisco. Myself, my partner, my family and my friends have all greatly enjoyed this area.

If the Macro tower were to be build, much of that open and safe space would be comprised. It would remove a beautiful and open skyline that all of the residents of Diamond heights village and those living in the surrounding buildings of Diamond heights enjoy on a daily basis. It would also greatly increase the fire risk in the area, since a large diesel fuel source would be placed in a grove of eucalyptus trees, which have a very high fire risk. Not only does it remove a place of solace so many residents hold dear, but it puts a direct threat on the safety of the homes in the area, and the delicate ecosystem within Glen Canyon.

I urge those in power to reconsider this plan, as it has little to no positive benefits for any residents in the community.

Thank you for your consideration

From: arev2@pacbell.net
To: Board of Supervisors (BOS)
Subject: Proposed AT&T antenna at 350 Amber
Date: Wednesday, December 3, 2025 4:22:58 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please, oh please oppose AT&T's construction of a 104' antenna at 350 Amber Dr. Among other serious reasons, I have a personal one: I experience chronic disabling vestibular migraines and severe vertigo; I believe EMT's are a possible factor.
PLEASE OPPOSE THE CONSTRUCTION OF THIS ANTENNA. I vote in every election.

Patricia Everall
236 Amber Dr
District 8

From: Dennis
To: Board of Supervisors (BOS)
Subject: Proposed communication tower at 350 Amber Drive
Date: Tuesday, December 2, 2025 2:49:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I strenuously object to the proposed AT&T tower at 350 Amber Drive.

It will be a 100 plus tall structure with TWELVE new antennas and NINE new remote radio units and equipment. This huge communication facility is not needed in our neighborhood. It will be an eye sore to our beautiful part of the city.

AT&T is attempting to expand their commercial reach far beyond Diamond Heights. A smaller, lower, one unit antenna could provide adequate telephone service where needed.

Please vote no on this proposal.

Thank you for your consideration.

Dennis Senft
319 Amber Drive.

From: Sharon Hom
To: Board of Supervisors (BOS)
Subject: Do not want the 104’ antenna
Date: Tuesday, December 2, 2025 9:10:09 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Our family and neighbors do not want the 104’ antenna at 350 amber st. It is fire and health hazardous.

I recommend a communication system that will alert us when cell phones don’t work.

Sharon hom
257 gold mine dr

Sent from my iPhone

From: Stephanie Pappas
To: Board of Supervisors (BOS)
Subject: Opposition letter to At&T tower Amner Drive 94131
Date: Wednesday, November 26, 2025 4:27:25 PM
Attachments: Pappas, Steph opposition to At&T Tower Amber Drive.docx

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Angela Calvello,
Please find my letter regarding the proposed tower in Diamond Heights and include my voice as opposition to this project. Thank you for alerting me to the opportunity to give my opinion
Thank you,

Stephanie Pappas
4235 Diamond heights Blvd #204
San francisco, CA 94131

November 26, 2025

Angela Calviaao
Clerk of the Board
City Hall, 1 Carlton B Goodlett Place room 244
San francisco, Ca 94102
bos@sfgov.org Sent via electronic transmission 4:20 pm 11/26/25

Subject: Please Grant Appeal File No. 251094 **– CEQA Exemption of AT&T Macro Tower – Environmental & Safety Concerns**

Ms Cavillo,

Today I received by mail your invite to comment again on this matter.
In response:

I oppose the proposed tower at 350 Amber Drive in Diamond Heights San Francisco, Ca.
for the several reasons outlined in the following letter.

I live and vote in San Francisco and have for 31 years. This neighborhood is important to me.
I urge you to grant the appeal of the Planning Commission's CEQA exemption for the proposed 104-foot AT&T tower at 350 Amber Drive. I do not want this tower in our neighborhood.

My chief concern is the beauty of the natural space. I consider the impact on wildlife. I realize that my neighbor's property val;ues will probably go down as no one wants a two story house under a ten story macrotower emitting electromagnetic energy and disturbing the natural beauty at the heart of San Francisco.

I also question the safety of placing not only so much electricity (has a source been identified?) constantly running so near the eucalyptus trees and other flammable material. The back up tank of diesel fuel is also a safety concern.
These concerns and others are well stated in the following paragraphs:

This huge 10-story tall industrial electronic structure does not belong in a residential neighborhood next to Glen Canyon Park and George Christopher Playground, especially on land mapped as an earthquake/landslide zone with documented seismic failures. It will stand out far above the treeline above Christopher Park and dominate the skyline above Glen Canyon. It is not a small structure like an add on to an existing garage, it is a massive tower!

Key Safety Issues in this location:

- **Fire Risk:** This Urban Wildfire Interface area should not have a 190-gallon diesel tank next to combustible vegetation in a very windy area of San Francisco. Towers must power down before water application, causing dangerous delays for evacuation in a neighborhood of two lane streets.
- **Seismic Landslide Risk:** This site has history of seismic failures; it is on CA state and San Francisco hazard maps as landslide area and documented unstable soil cannot safely support this massive heavy structure.

- **Natural Resources:** Glen Canyon Park is on of San Francisco “Significant Natural Resource Areas” and habitat for flora, fauna including many sensitive species of birds that will be endangered both by the construction that will require digging of a hole greater than 60 feet to reach bedrock and by potential fire and landslides.
- **Approval made based on Misleading Claims:** AT&T says the tower is needed for 911 and FirstNet (wireless spectrum for first responders in disasters like 911), but our Fire Chief confirmed 911 doesn't rely on one network, and neither Fire nor Police require First Responders to use FirstNet. ATT counters that they are required by their contract with the Federal Government to provide FirstNET nationwide and signal strength in some areas is too weak to reach FirstNET (as shown by their “simulated” maps). However, FirstNET has signal boosters that can be added to phones without having to add massive antenna structures in residential neighborhoods.

There are only two Wireless Antenna Facilities over 100 feet high in San Francisco both are in commercial areas and atop buildings.

This would be the **first free-standing tower of this height and bulk** near homes and parks in our city and in areas of high fire danger and in landslide/seismic zones.

Other telecom carriers serve this area without such intrusive structures. But one can guess At&T will sell them access to this giant tower for a profit.

I don't believe it's really about better cellular service in Diamond Heights.-but perhaps signals as far away as Sam jose and beyond. 104 feet is really tall.

I see this line we wish to draw against this tall tower as in line with the choice San Franciscans have always made to keep our structures less tall, especially in residential neighborhoods.

Please support the appeal of this exemption and require a full Environmental Impact Report examining safer alternatives and detailed geotechnical studies.

If approved here, AT&T will demand similar towers throughout San Francisco.
Safety must come first.

Sincerely,

Stephanie Pappas

Stephanie Pappas
5235 Diamond heights Blvd #204
San francisco, ca 94131
415 286 2680
stephpappaspi@gmail.com

From:	Judith Garvey
To:	Board of Supervisors (BOS); MandelmanStaff (BOS); Mandelman, Rafael (BOS)
Subject:	Opposition to proposed 104" ATT antenna at 350 amber
Date:	Wednesday, November 26, 2025 11:46:31 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Supervisor Mandelman and Board of Supervisors

Continued opposition to proposed 104’ antenna at 350 Amber Drive for many reasons (fire risk, causes cancer, lowers property value, problematic if earthquake). The City does not have a good water defense system in the event of an earthquake and fire to defend Diamond Heights and Glen Park. Our area will look like the disaster areas in Southern California. Keep it out of Diamond Heights and Glen Park.

Sincerely,

Judith Garvey
5526 Diamond Heights Blvd, SF 94131

From:	m h
To:	BOS Legislation, (BOS); MandelmanStaff (BOS)
Subject:	-File No. C251098 – Support the Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date:	Tuesday, December 2, 2025 12:02:12 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,

Please Support Appeal File #C251098 - Conditional Use Authorization
I urge the Board to support this appeal and overturn the Planning Commission's approval of AT&T's proposed 10-story antenna structure in Diamond Heights. This massive tower would be constructed in open space in the forested border of Glen Canyon Park and George Christopher Playground. This will set a dangerous precedent for residential neighborhoods throughout San Francisco.
This would be the first free-standing tower over 100' tall located in a San Francisco residential neighborhood next to parks. Such massive antenna structures belong in commercial or industrial zones where they currently exist, not in open space zones that are community gathering places. The neighborhood was intentionally designed with low-profile buildings to preserve views of natural areas.
This 104-foot high tower topped with bulky electrical structure is not compatible with the surrounding natural landscape of the neighborhood. This proposed structure with lots of apparatus on it 40 feet above the tree line so it cannot hide the Eucalyptus trees. The application and the CEQA review does not address how these trees will be protected and preserved.It also does not address hazardous materials on the site – which are identified in the ATT plans with a sign.

Christopher Park and Playground and Glen Park Canyon are active, dawn to dusk, utilized daily by approximately 800 people in the winter months, when soccer and baseball season are on a pause.

Having lived here for 30 years and walked in the neighborhoods overlooking the canyon, around Christopher Park and Playground, and up and down thru the canyon, there are few vistas from where this proposed 104' structure will not dominate the sky above our natural environment. Kids playing on the playground and field need to be experiencing the natural world – in an area free from the hazards of an AT&T, 10-story electrical tower.

GlenmPark Canyon is unique - it is one of the **remaining** few areas of San Francisco acreage that allows residents, and wildlife, to celebrate the natural features of the land with trails, massive rock formations, a creek and dozens of 100 ft trees - as well as providing habitat for wildlife. This precious open space should not be treated as a utility hub for commercial use or a wasteland to be developed.

Those of us living here in Noe Valley and Diamond Heights are counting on City Planners to protect the residents' interests - and recognize the importance of safeguarding our open spaces by discouraging misuse of San Francisco land that - for decades - has provided necessary and well-utilized outdoor space for families and nearby neighborhoods, and for wildlife too."

Margaret C. Hoppe
1604 Diamond Street
San Francisco, CA 94131
415.860.7903 *mobile*

From: Allan LeBlanc
To: BOS Legislation, (BOS)
Cc: Calvillo, Angela (BOS)
Subject: Public Comments to: CEQA Environmental Exemption Appeal Conditional Use Authorization Appeal, 350 Amber Drive
Date: Tuesday, December 2, 2025 10:49:54 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

SF Board of Supervisors,

I encourage you to reject the complaints to the CUA and CEQA exemption filed by the Diamond Heights Community Association and allow this cell phone tower development to proceed as originally planned.

I am a San Francisco resident and father of 3 girls. I previously lived at 977 Duncan Street and am a current resident of Glen Park. My children attended Noe Valley Nursery School next to the Police Academy, and I am a frequent visitor to both Christopher Playground and the Diamond Heights Shopping Center. Our daughters learned to ride their bikes in the Police Academy Parking Lot, one of the few large flat areas in the neighborhood. All that to say, I am very familiar with the proposed location of this antenna and am a member of the impacted neighborhood.

I encourage you to allow the construction of this tower to proceed for the following reasons:

1. Safety - Cell phone service at Christopher Playground and the surrounding area is terrible. Noe Valley Nursery School has to maintain a legacy landline in order to ensure phone access to teachers and parents. I can't tell you how many times a sick kid was picked up late or a parent was unable to quickly get a hold of the school for a family emergency due to the lack of cell phone service.
2. Value of cell service - I have seen the lack of cell phone service impact residents in ways large and small. As a recent example, patients have been unable check in for their vaccine appointments at Walgreens because there is no cell service within the building.
3. Good location - the Police Academy is an excellent location for this tower. The tall eucalyptus trees around Christopher playground will make this tower effectively invisible from the park. The appearance of the tower has been dramatically exaggerated in fliers distributed by the Diamond Heights Community Association.
4. Regularity in planning and development - These NIMBY concerns and obstruction to regular development in San Francisco are examples of why housing is so expensive in this city. This is a small issue, but the fact that every change in our city requires multiple meetings and appeals is part of the problem. Developers both large and small need predictability in planning, and this is an example of something that will improve the lives of residents and should be approved as a matter of course.

I am unable to attend the meeting in person, but trust this will suffice as a counterpoint to the DHCA objections which are not representative of the entire community.

Sincerely,
Allan LeBlanc

--
Allan LeBlanc
352.514.9626
allan.leblanc@gmail.com

From: Linda English
To: BOS Legislation, (BOS)
Subject: File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Tuesday, December 2, 2025 9:35:56 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Supervisors,

Please find my attached comments which were made to the Planning Commission before the Sept 25 meeting and unacknowledged by four of the Commissioners at the Sept 25 hearing (the vote was 4:3). They are still relevant and important reasons why the approval of this massive antenna structure must be overturned. An antenna of this size (10 stories) in a neighborhood zoned for four stories, belongs in a commercial or industrial area NOT in a residential neighborhood. This would be the only antenna over 100 feet tall in a residential neighborhood, the 2 existing antennas are in commercial areas. Other tall (but not reaching 100') antennas are near freeways, BART stations, or attached to tall buildings and NOT adjacent to parks.

This huge electric structure which will be 20' above the tree line, is not **"necessary"** there ***are*** **alternative locations and *less intrusive* antenna systems** *and* alternative ways to boost "FIRST NET" (for First Responders) – which was the reason 4 of the Planning Commissioners cited as their excuse to approve the structure. For the record: Police and Fire do not require First Responders to use FIRST NET, the Commissioners were misled by AT&T. AT&T wants this massive structure to increase their market share AND to likely add antennas and a second layer of ugly antennas to other carriers on this structure – they recently stated they would not rule out adding more antennas (making the structure heavier, more bulky and greater risk for landslides and fire in our windy neighborhood).

It is not **"desirable"** from a safety perspective, it is a major fire risk in an Wildfire/Wildland Urban Interface Area and is an area identified on the SF Landslide-Seismic hazard map. It will change the character of the neighborhood known for its open skies, nature and views of the playground and canyon. The danger of fire and exposure to Radio Frequency Radiation is not desirable for the wildlife in the canyon, flora and birds and insects and according to the 1996 Telecommunications Act RFR standards are not considered under the definition of "environment" the way humans are, in fact RFR affects avian life at a much lower frequency than humans not to mention antenna collisions to a massive tower built in the middle of a forest.

Undoubtedly this is *desirable* for AT&T to build their corporate coffers, but it is **NOT** desirable at the expense of residents in a neighborhood whose parks and nature bring us together.

Linda English
961 Duncan Street

* Attachment follows

Dear Rafael Mandelman,

And Members of the SF Board of Supervisors

Supervisors,

I have lived in San Francisco for 65 years and have resided at 961 Duncan for 2 1/2 years. I am writing to urge you to grant the appeal of the Planning Commission's CEQA exemption for the proposed 104-foot AT&T tower at 350 Amber Drive. This is PUBLIC property that ATT will make a profit from selling to new customers beyond the neighborhood.

I live near Glen Canyon and frequently I walk my dogs around Christopher playground where this giant antenna would change the trees and the very nature of the park and be a major fire danger.

This is not a "small minor structure." It does not qualify for a Class 3 CEQA exemption. It is a 10-story industrial facility with a 500-square-foot foundation, a 190-gallon diesel fuel tank, and extensive electrical equipment. It would be one of only two wireless facilities over 100 feet high in San Francisco, and the only free-standing tower of this height in a residential neighborhood adjacent to parks.

My primary concerns are safety because my bedroom, living room and dining room windows are directly across from the proposed site!

Fire Risk: The site is classified as an Urban Wildfire/Wildland Interface risk area. The 190-gallon diesel backup generator for this massive electrical structure sits immediately next to aging oak and eucalyptus trees and must be tested monthly. These generators can cause fires. Telecom towers must power down before firefighters can apply water, causing dangerous delays. One spark in Diamond Heights' strong winds could be catastrophic for Glen Canyon Park, George Christopher Playground, the nearby nursery school, homes, and the shopping center. Fires are more and more common: Oakland Hills, Sonoma County, Monterey, Pacific Palisades. Climate changes is here to stay and SF had its first Red Flag Days last year. We need to plan to prevent fires in Urban Wildfire Interface Areas, not provide incendiary opportunities for fires to start.

Seismic/Landslide Risk: The location is mapped as an earthquake and landslide zone by both the California Department of Conservation and San Francisco's Seismic Hazard Map. The Police Academy site has a documented history of seismic failures. A 104-foot tower weighing several tons on a 500-square-foot base in unstable soil (which will be made more unstable by the need to dig 30-60 feet to place the pole) poses significant landslide and soil failure risks which would be disastrous in an earthquake.

Environmental Impact: Glen Canyon Park is one of San Francisco's "significant natural resource areas" famous for the rare blue mission butterfly. The construction of the tower would damage the forest's roots which provide home to sensitive bird habitats that nest in the trees, coyote bush and tall grasses. A fire or landslide would eliminate the Canyon's flora and fauna. This tower would permanently blight the Diamond Heights historic "modernist" neighborhood, designed to blend buildings with nature and preserve views and open space.

AT&T claims this tower is essential for 911 service and FirstNet, but our Fire Chief confirmed that 911 calls do not rely on one specific network, and neither the Fire Chief nor the Police Captain state that FirstNet is required on First Responder phones. Other carriers provide coverage in this area without such intrusive structures.

The four Commissioners who approved the CEQA Class 3 Exemption ignored expert testimony and legitimate safety concerns. If this industrial structure is approved in a landslide and fire zone next to two parks and close to 2 nursery schools and a kids playground, AT&T will demand similar massive towers in other neighborhoods using FirstNET or lack of coverage asserted by "their independent consultants" as their excuse. Other carriers in the neighborhood are available as is fiber to the premises. In this time of innovation, it's a sad comment that ATT is still using old invasive technology. Perhaps their real goal is to expand their market far beyond this neighborhood.

The FCC still allows local government to determine where cell towers are placed. Please make sure they are safe and meet state laws and the SF General Plan.

I urge you to grant the appeal and require a full Environmental Impact Report examining all alternatives, including a detailed geotechnical study addressing the site's documented seismic failures.

Safety must be the Board of Supervisors' priority.

Thank you for your consideration.

Sincerely,
Linda English

961 Duncan Street

From:	Vladimir Kostyukov
To:	BOS Legislation, (BOS); MandelmanStaff (BOS); Ho, Calvin (BOS)
Cc:	BOS-Legislative Aides
Subject:	File No. C251098 – Appeal: Conditional Authorization Use Approval at 350 Amber Dr Project
Date:	Tuesday, December 2, 2025 9:19:38 AM
Attachments:	CUA-Appeal-Support-Letter-Amber-Dr-350-Kostiukov.pdf

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Honorable Members of Board of Supervisors,

Please find my letter **in support** of the CUA appeal of the AT&T project for the 10-story monopole in Diamond Heights. Our city and our neighborhood doesn't deserve this monstrosity. It's going to be the city's first freestanding cell tower placed in the residential neighborhood, 10 feet away from the park, 200 feet away from the children playground and two pre-schools.

I urge you to stand against corporate greed and side with your neighbours!

To: bos.legislation@sfgov.org, calvin.ho@sfgov.org
Cc: mandelmanstaff@sfgov.org
Title: File No. C251098 – Appeal: Conditional Authorization Use Approval at 350 Amber Dr Project

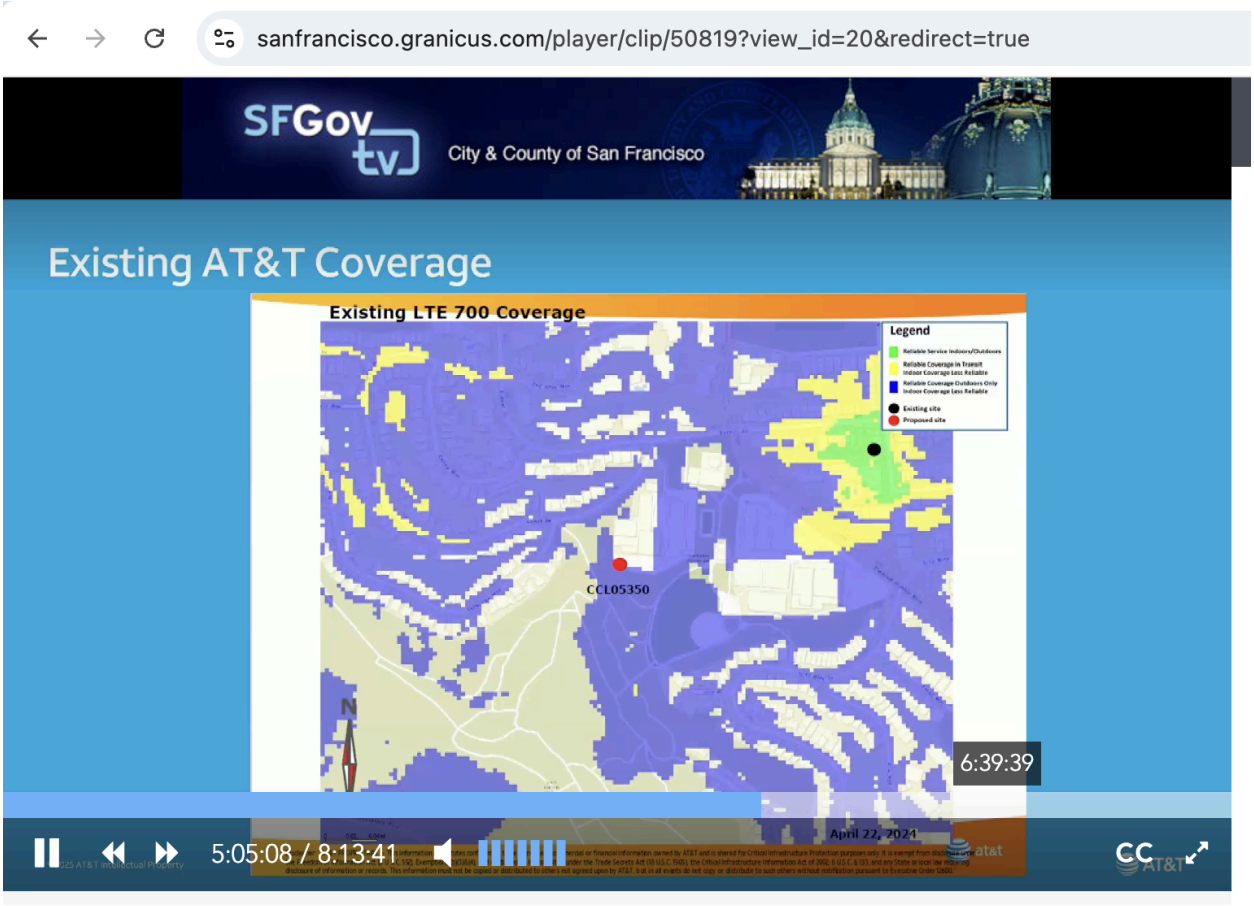
Honorable Members of Board of Supervisors,

My name is Vladimir Kostiukov, I live on Amber Dr in San Francisco, with my wife Julia and our 2yo daughter Nina. I'm urging you to support the people of Diamond Heights in their right to decide what's needed in their community. This 10-story tower, which is going to be the first ever, free-standing cell tower over 100 feet placed in the residential neighborhood in San Francisco, is absolutely NOT NEEDED next to our park, our playground, our children and elderly.

On September 25, 2025, the city Planning Commission members described the proposed AT&T Cell Tower in the Diamond Heights neighborhood as "desperately needed", following the misleading arguments presented by AT&T. It surely is desperately needed for the success of the business of AT&T as they reach as far as HWT 280 with the new cell tower, but it in no way benefits the community of Diamond Heights - it's quite the opposite and will make their cost of living higher and will put their property values at risk.

Despite 80+ letters in opposition received by the Planning Commission, 20+ people waiting 5 hours in the chamber and speaking their hearts against the project, the city still voted 4:3 to approve it. The people weren't heard and that's why the community were able to come together and collect needed signatures (85 signatures) to file the CUA appeal. The neighbors of Diamond Heights again and again say this project **IS NOT NEEDED NOR DESIRABLE** in our neighborhood and it's our right to decide that.

The Planning Commission was specifically misled by this LTE 700 coverage map presented by AT&T during the hearing.

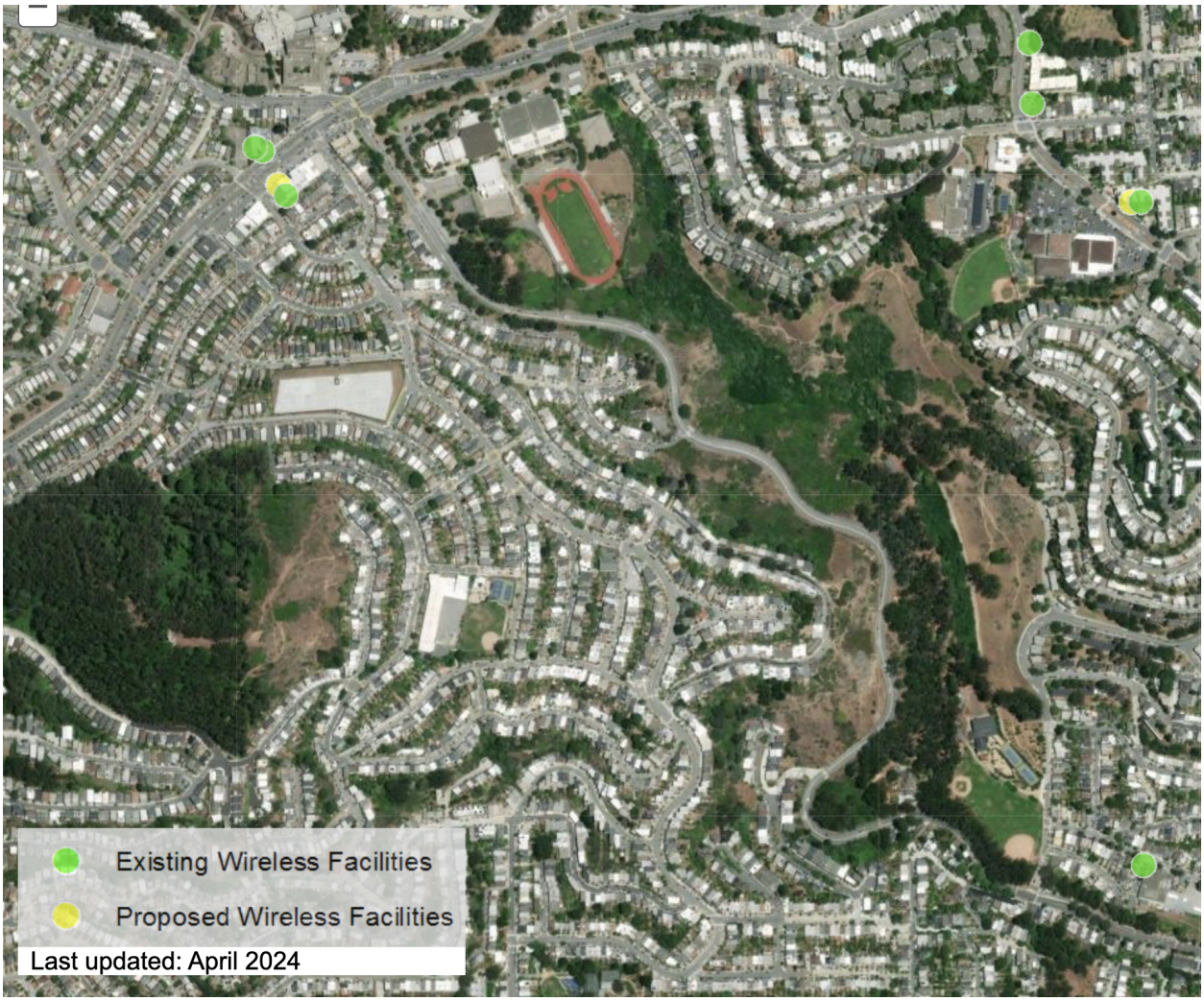


The map above shows “Existing LTE 700 Coverage”, which refers to **4G LTE** service operating in the 700 MHz spectrum band. 4G LTE is mainly used to deliver internet services on consumer devices, IT’S NOT USED TO MAKE PHONE CALLS or power the SMS protocol. The Planning Commission mistakenly interpreted this map as any cell coverage, assuming people won’t be able to make 911 calls or receive emergency alerts (i.e., Amber Alerts). This is simply NOT TRUE.

Additionally, I question the accuracy and integrity of this map. Here is a photo of my phone I took from the middle of the Christopher Athletic Field (just 100 feet away from the proposed project site), displaying a 5G signal with 4/5 bars. Note - I’m an AT&T customer myself and I think their coverage in Diamond Heights is already one of the best.



What AT&T failed to communicate to the Planning Commission during the hearing is that there are already 7 existing sites with the cell equipment from Verizon and T-Mobile around the Glen Canyon Park, with thousands of happy customers. Note that none of these sites are standalone monopoles - all of these are just equipment placed on the roofs of the building, which is what urban cautious placement should be about.



On September 25, 2025, Lydia So voted to support the AT&T project on the argument of her not being able to receive a call from her child who is at the Glen Park Recreation Center, citing there might be coyotes and the kid needs to be able to call for help. Lydia So didn't realize that there is already an AT&T 5G equipment placed less than one block away from the recreation center. It is in fact the best place to use AT&T around the canyon.



To summarize, the vote the Planning Commission took on Sep 25, 2025 was based on false arguments and misinterpretation and should be overturned by the Board of Supervisor in a fair game. Please restore the democracy and common sense in our city, **vote to support the Diamond Heights community and my family**.

Vladimir Kostiukov,
261 Amber Dr, San Francisco, CA 94131

From:	John Avalos
To:	BOS Legislation, (BOS); Mandelman, Rafael (BOS)
Cc:	Calvillo, Angela (BOS); ChanStaff (BOS); SherrillStaff; SauterStaff; wong.staff@sfgov.org; MahmoodStaff; DorseyStaff (BOS); MelgarStaff (BOS); FielderStaff; ChenStaff
Subject:	Support – File No. C251098 Uphold Appeal of Conditional Use Authorization: 350 Amber Drive Project
Date:	Tuesday, December 2, 2025 12:40:55 AM

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Subject: Support – File No. C251098

Conditional Use Authorization Appeal – 350 Amber Drive Project

Request: Uphold the CUA appeal and grant a continuance

Dear President Mandelman,

Members of the San Francisco Board of Supervisors

c/o Clerk of the Board of Supervisors

I am writing in strong support of the neighborhood appeal of the **Conditional Use Authorization (CUA)** for the proposed 104-foot AT&T macro tower at **350 Amber Drive**, and to request that the Board of Supervisors **grant a continuance** so that the community may adequately prepare its case.

The project fails the core metrics required for Conditional Use approval. It is **not desirable, not necessary, not compatible with neighborhood character, and fundamentally inconsistent with the General Plan and the intent of the Open Space designation.** Aesthetic criteria—including those established by the City's own Personal Wireless Service Facility Site Permits Ordinance—directly inform whether the project is desirable. And given the flawed and rushed process that preceded this hearing, a continuance is essential to ensure fairness.

1. Procedural Fairness Requires a Continuance

The community was blindsided by the sudden notice of this hearing. On November 18, after residents contested the Department of Public Works' rejection of signatures on the Conditional Use appeal petition, DPW acknowledged that **they had miscounted signatures**. DPW and Planning used **different maps and different lists** to determine eligibility, leading to erroneous rejection of valid signatures.

Once the error was acknowledged, the Clerk sent out hearing notices with a **December 9 hearing date and a December 2 materials deadline**, spanning

Thanksgiving week—giving volunteer residents almost no time to raise legal funds, prepare materials, or schedule meetings with Supervisors.

AT&T received **two continuances** at the Planning Commission. Residents now deserve the same basic fairness. A continuance is warranted to correct the inequities of the process and allow the community adequate time to prepare.

2. The Project Is Not Desirable as Required Under Planning Code §303

Conditional Use approval requires the project to be **"necessary or desirable for, and compatible with, the community."** This project is none of these.

Aesthetics Are a Required Part of Desirability
In 2010, as a member of this Board, I authored the **Personal Wireless Service Facility Site Permits Ordinance**, which explicitly requires that wireless facilities be evaluated for *visual and aesthetic impact*—and authorizes the City to reject applications based on aesthetics alone. The California Supreme Court unanimously upheld this authority in 2019.

Desirability includes protecting:

- the **visual character** of the neighborhood
- the **natural landscape** and sky views of Glen Canyon and George Christopher Park
- the **planned open-space character** of Diamond Heights

No free-standing 100-foot wireless tower exists in any San Francisco residential neighborhood. Approving the first of its kind here is not desirable for the neighborhood, the city, or future planning precedent.

3. The Project Is Not Necessary

The project is not necessary to fulfill emergency response obligations or wireless coverage requirements.

- **FirstNet does not require this macro tower.** Signal enhancement equipment is available for indoor coverage at the Police Academy.

- Other carriers provide adequate service to the area through **smaller, less intrusive distributed antenna systems**—exactly the type used in other hilly neighborhoods.

- AT&T's primary motivation appears to be **market expansion**, not public need.

Necessity must be based on actual service gaps—not corporate preference for large macro infrastructure placed on public land.

4. The Project Is Not Compatible With Neighborhood Character

The Conditional Use standard requires compatibility with:

- **the existing neighborhood**,

- **the General Plan**, and

- **the surrounding open-space environment**.

This project fails all three.

Neighborhood Character
Diamond Heights was developed in the 1950s–60s as a **purposefully planned community** by the Redevelopment Agency, with **undergrounded utilities** to preserve views of the trees and the sky. It is a neighborhood defined by open space, natural vistas, and adjacency to parks.

A 10-story industrial monopole—bulkier than anything in the surrounding area—directly contradicts these defining characteristics.

General Plan Consistency
The General Plan prioritizes:

- **protection of open space**,

-

preservation of **natural vistas**,

- **compatibility of new development** with established neighborhoods, and
- minimizing **visual and environmental intrusions** into parks and habitat areas.

Placing the city's tallest free-standing tower in an Open Space Zone directly at the edge of Glen Canyon violates these principles.

Open Space and Habitat Corridor
The site shares a tree canopy with both parks and sits at the entrance to one of San Francisco's most ecologically rich natural areas. The tower constitutes a major industrial intrusion into a wildlife corridor used by birds and mammals. Industrial-scale lighting, heat, and electromagnetic emissions all create risks for birds—including collisions and attraction to warm antenna surfaces.

This location is among the **least compatible** imaginable for this scale of infrastructure.

5. The Project Sets a Harmful Citywide Precedent

Approving a Conditional Use for such a structure in an open-space-adjacent residential area would:

- invite similar proposals in other neighborhoods
- undermine decades of wireless siting policy
- weaken the City's ability to require "least intrusive means" siting
- support telecom industry efforts to erode local control

This is not only a Diamond Heights issue—it is a **citywide governance issue**.

Conclusion

For all of these reasons—failure to meet the thresholds of **desirability, necessity, compatibility, and General Plan consistency**, combined with a flawed process that denied residents fair participation—I respectfully urge the Board of Supervisors to:

> **1. Grant a continuance so that neighbors may fully prepare their case and receive the same procedural fairness afforded to the project sponsor.**

When the actual CU appeal is heard

> **2. approve the neighborhood's Conditional Use Authorization appeal for the project at 350 Amber Drive**

Thank you for your consideration and for your commitment to protecting San Francisco's neighborhoods, natural areas, and civic process.

Sincerely,

John Avalos
Excelsior District, San Francisco

From:	catherine dodd
To:	BOS Legislation, (BOS)
Subject:	Conditional Use Approval Appeal File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date:	Tuesday, December 2, 2025 12:18:50 AM
Attachments:	cdodd cua letter dec 1.docx

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Supervisors attached you will find my many reasons that this Conditional Use Appeal should be approved. Most reference the Planning Commission exhibits from the Sept 25 meeting and had answers that were provided by Mr. Lentz (ATT) at the request of the Planner John Dacey (discovered with a Sunshine request). ATT's perspective is well documented throughout the exhibits. It is NOT the perspective of tax payers and residents on the neighborhood.

Some background. The homes within 300 feet of the Proposal were notified of an April 7 2024 informational meeting. The rest of the Diamond Hts neighborhood and the many park users (est.500-800 visitors/day) were not notified. It was a dark stormy night and not many people attended. Lots of questions were posed and answers promised by Cammy Blackstone of ATT. No answers came. Apparently ATT began working on this in 2023. In June of 2025 neighbors were notified by the Planning Department of a hearing on the project on June 28 which was continued by ATT until July 15 and was again continued to September 25. Over 20 people waited 4 hours to testify, some had to leave. 77 letters of opposition had been turned in although the Planning staff only reported 32 in his report. In addition six local realtors attested to property value decline near Wireless Towers, a national telecom fire expert opinion and an opinion from the New Hampshire state commission on wireless facilities all included specific comments. Only three of the Commissioners asked questions relevant to the materials and testimony submitted by the neighborhood which was disappointing.

The Commission Vote occurred after Chair Soo interrupted Commissioner Imperial saying "she had just received an emergency email (she was looking at her phone) from Sherif Miyamoto stating the project should be approved for emergency FirstNET communication." None of the other commissioners had received the email and in fact a motion was made to continue the item to learn more about FirstNET which failed. The "fourth and deciding vote" to approve the project was by Commissioner Braun who had begun the discussion by saying he was undecided but after hearing from Sheriff Miyamoto he would vote yes.

Public Records requests documented that Cammy Blackstone of ATT had communicated with Chief Crispen at a "gala" and the next day had provided Fire Chief Crispen a draft letter of support asking that he send it to Commision Chair So, and Planning staff - but he declined. At a community meeting on October 15, Fire Chief Crispen and Captain Newbeck from Ingleside Station were asked if they used FirstNET and they replied that their First Responders were not required to use FirstNET. The Police Dept was unable to locate any communication however ethics records document Sept 12 meetings with Chief Crispen, Sheriff Miyamoto and Interim Police Chief Yip. What's important is that "FirstNET use" convinced 4 of the Commissioners that this massive tower, the only one of this size, should be approved in a residential neighborhood near 2 well used parks even though FirsNet was not used by Fire and Police for emergency communication. Please read the attached specific reasons the Planning Commission (and staff) reasons had a profound bias for ATT. Thank you.

December 1, 2025

Members of the SF Board of Supervisors
c/o Clerk of the Board
RE: Support -File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project

Supervisors,
Please read through this history and detailed list of inaccuracies and reasons to approve this CUA appeal.
According to the Glen Park History Project Diamond Hts was the second project of the San Francisco Redevelopment Agency. It was created with 2 million cubic yards of dirt and rock removed from the tops of Gold Mine Hill to the south and Red Rock Hill to the north to regrade the saddle between the hills and to ***infill*** decommissioned rock quarries (as shown in an aerial view, taken August 15, 1960, San Francisco Public Library). Filling in the saddle that dipped between Gold Mine and Red Rock Hills created the large flat area for the development of a "*Neighborhood Center*," **including** the shopping center **and Diamond Heights Elementary School (now the Police Academy).**

Diamond Heights is special as a historical resource with its mid-century modern architecture - according to the San Francisco Planning Department in a Historic Resource Evaluation Response for a property at 241 Amber Drive, dated June 13, 2018, the property is located within the "Diamond Heights Stage 1 historic district eligible for listing in the California Register under Criterion 1 as an important component of the larger Diamond Heights Redevelopment Project Area that had a ajor impact on San Francisco's built environment, and Criterion 3 as a cohesive large scale tract development of Modern residences developed by some of San Francisco's most important architects and developers." These architects and developers included Joseph Eichler, Vernon DeMars, Claude Oakland, Raymond Galli, among others. The neighborhood was master-planned in the 1960s and the neighborhood's origins were to conform to a low-profile footprint. It was the neighborhood first to underground all wires to preserve views of nature and the sky.
"According to Modern Diamond Hts" a Master's Thesis written and published by Simonson, with the assistance of the SF Planning Dept, Diamond Hts is unique because "buildings do not just relate to each other as primary facades lined up on a street; the relationship between buildings and the site is dynamic. Rooflines**, view shed**s, and **access to open spaces** are **all planned elements.** Rather than being understood in two-dimensional space, like a land use or zoning map where size and adjacency are the primary considerations, Diamond Heights can be understood as **a plan organized in three-dimensional space where height and vertical relationships are as important as horizontal relationships."** Further, "the material choices and construction of these buildings are tied to their Modernist project and aesthetic."

A vertical metal electrical structure 10 stories high is not part of that Modernist aesthetic. We must protect the character of this historic architectural area and the proposed massive electrical structure towering above the tree line will damage the harmony and character of the historical neighborhood.

This 104 foot high pole topped with bulky electrical structure and cannot possibly "be designed to be compatible with the surrounding nature of the vicinity as described in the Planning exhibits

from the Sept 25 Commission meeting. ATT states:the proposed monopole will be painted brown and be located adjacent to a grove of Eucalyptus trees to minimize visual impacts" as described in the "EXECUTIVE SUMMARY Conditional Use AUTHORIZATION & SHADOW FINDINGS." ***It's not just a brown pole; it's a structure with lots of apparatus on it 20 feet above the tree line so it cannot hide the Eucalyptus trees. BTW the Eucalyptus trees in the area are an important part of SF History – look up the "gum show girls" who started San Francisco's botanical preservation when families came to this neighborhood in the 1920s to camp among nature. Nature is still important 100 years later. The application and the CEQA review does not address how these trees will be protected and preserved. It also does not address hazardous materials on the site – which are identified in the ATT plans with a sign.***

We've lived here have walked our dogs in the neighborhood overlooking the canyon, around Christopher Park everyday and down and up the canyon. There will be few vistas from where this proposed 104' structure will not dominate the sky above our natural environment. Kids playing on the playground need to be in nature – not on a field with a 10 story electrical tower hanging over it. The irony that we encourage families to get their children outside in nature and OFF screens may be literally overshadowed by a wireless monstrosity supposedly needed for screens should not be lost.

Again, the EXECUTIVE SUMMARY states: "The overall location, setback from public streets, height and design of the proposed facility, **including visible screening elements is situated so as to avoid intrusion into public vistas, and to ensure harmony with the existing neighborhood character and promote public safety."** It is set back from the street level at the top of an open space park,– but the surrounding homes with precious vistas are above the street level.

NO! ***This IS AN INRUSION INTO PUBLIC and Private VISTAS. In fact it obscures the views of the park and the tree canopy from Duncan street homes .It does NOT harmonize with the existing neighborhood character and finally: it creates a safety hazard because the trees are very very close to the proposed "structure" they sway significantly when it's windy, and it's windy much of the time in the "heights" (Rec & Park has been cutting down trees for safety reasons, these trees are unlikely to last the length of what I assume (because I couldn't find it in the proposal) is a 20 year lease. Further many many fires have occurred in an around wireless facilities some caused by wind (Malibu), some caused by trees (northern CA 2023) to name only a couple of CA fires! Eucalyptus is a torch because of its high oil content. Adding an electrical structure, an ignition grid, not to mention a 190 gallon diesel fuel tank and a generator to this area is a fire waiting to happen and is just plain dangerous and certainly does not "promote public safety."***

The statement that: "the AT&T Mobility Radio Frequency Engineering Team provide that the Project Site is a preferable location, based on factors including quality of coverage and *aesthetics"* **is unfounded**!*. The proposed structure and surrounding cabinets and tanks are NOT aesthetically acceptable to the neighborhood.* Further ATT asserts: "the proposal would not be detrimental to the health, **safety**, convenience, or general welfare of persons residing or working in the vicinity"*. Again, health and safety: health- repeated regular exposure to diesel emissions with Benzene and particulate matter associated with cancer and other pulmonary*

maladies, the Police Academy trainees use the building that is just feet away from the "the fuel tank and the 10 story structure" for exercise training and quiet study. The day care center in Christopher park just over 100 feet away will be effected by the diesel emissions.

"Nature of proposed site, including its size and shape, and the proposed size, shape and arrangement of structures….. The proposed antennas will be mounted on the proposed 104-foot tall monopole." *Monopole is a misleading description of the structure holding the monopole up.*
"The **associated equipment cabinets will be located behind the police academy and not visible from the public street."** ***Not true****: People will see the associated* ***equipment cabinets and fences and the 190 gallon diesel fuel tank and generator. Walkers, joggers, hikers, picnickers, families trying to enjoy nature will see these structures as well as the MASSIVE industrial multiple antenna ray 20 feet above the tree line.***
Having a fuel tank creates a greater fire danger and diesel fuel creates known health dangers.
Towers often emit high pitched noise which is disorienting for wild life, and the generators are noisy. *If ATT states that the generator is a back up, where is the electricity coming from, who is paying for it and how will it affect our unreliable power grid?*

The Exec Summary states regarding **"**Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs; The facility **will not affect** landscaping, **open space,** required parking, lighting or signage at the Project Site or surrounding area.
Open space is not just the ground it's the sky, the vistas. It ***will affect the open space above the tree line and at the edge of the playground and park No one wants to sit in the playground and watch kids play under a giant electronic structure. It ruins the aesthetic character of the playground and the canyon park.***

Conforming with the General Plan
D. "That the use as proposed would provide development that is in conformity with the purpose of the applicable Zoning District. "The Project at 350 Amber Drive is **generally desirable and compatible with the surrounding neighborhood** because the Project **will not conflict with the existing uses of the property** and will be designed to be **compatible with the surrounding neighborhood.** The overall location, setback from public streets, **height and design of the proposed facility, are situated so as to avoid intrusion into public vistas**, and to **ensure harmony with the existing neighborhood character and promote public safety."**
This is absolutely not factual: the height (104 fee t)and design is 20 feet above the tree line which impedes public vistas and interrupts the harmony of the existing neighborhood character. It will not promote public safety – it has danger signs all around it.

"There is an existing coverage gap in the AT&T Mobility wireless telecommunications network caused by inadequate infrastructure in the area. A new facility is necessary to close the service coverage gap in the network area bordered by the intersection of Amber Drive and Turquoise Way, O'Shaughnessy Blvd to the south and west, and Diamond Heights Blvd to the east. This gap area includes numerous homes, businesses in the Diamond Heights Shopping Center, well-

traveled roads, Glen Canyon Park, St. Nicholas Antiochian Orthodox Church and other points of interest in the vicinity"

The Diamond Hts Shopping Center and St Nicholas Antiochian Orthodox Church declined to cite telecommunications facilities on their property. ATT's "independent" emf consultant did NOT find coverage gaps – they found "relatively weak signals" which can be strengthened with distributed antenna systems and do not require MACRO towers the size of which are located ONLY in commercial and industrial areas not residential areas and parks.

Find another location or alternate technology to address so called coverage gaps. This is 2025 and ATT cares more about expanding market share than they do about our neighborhood. *We've had ATT as long as we've had internet. We use our devices in the park. We do not have a coverage gap. On April 10 at the meeting the ATT representative (who by the way never answered many of our questions and still hasn't) said ATT had only 5,000 customers in the area****. This TOWER is for ATT customers only and is a detriment to our property values, our fire safety, our property insurance premiums (which according to the Chronicle on June 20 have increased 42% in the last six years.***

More on the compliance with the "General Plan"

- **General Plan compliance**

"The Project is, on balance, consistent with the following Objectives and Policies of the General Plan: RECREATION AND **OPEN SPACE ELEMENT** Objectives and Policies

OBJECTIVE 1 ENSURE A WELL-MAINTAINED, HIGHLY UTILIZED, AND I**NTEGRATED OPEN SPACE SYSTEM**

Policy 1.10 **Ensure that open space is safe and secure for the City's entire population.**

"The Project will improve AT&T's coverage and capacity within George Christopher Playground and Glen Canyon Park, and in the Diamond Heights neighborhood."

ATT coverage has nothing to do with open space - this will damage the natural surroundings of Christopher playground and Glen Canyon Park. Open space includes the sky and the skyline. We should not look up or out at a 10 story antenna structure or have electrical cabinet structures next to the playground with "caution signs warning of radiation beyond FCC approved levels".

OBJECTIVE 2 MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL STRUCTURE FOR THE CITY. Policy 2.1**Seek to retain existing commercial and industrial activity and to attract new such activity** to the city. Policy 2.3**Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location**. "The Site will be an integral part of a new wireless communications network that will enhance the City's diverse economic base".

This is wrong, the area is not commercial, it's housing and a park and has nothing to do with commercial industry. It will negatively affect the social and cultural climate around the center of the neighborhood the parks.

OBJECTIVE 4 IMPROVE THE V**IABILITY OF EXISTING INDUSTRY** IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY. "Policy 4.1 Maintain and enhance a favorable business climate in the City. Policy 4.2 Promote and attract those economic activities with potential benefit to the City. **"The Project will benefit the City**

by enhancing the business climate through improved communication services for residents and workers."
The project has nothing to do with business climate. It will create hardship in the increased cost to homeowners' property insurance and decrease property value!

Objective 3:ESTABLISH STRATEGIES TO ADDRESS THE IMMEDIATE EFFECTS OF A DISASTER " The Project will enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services.
It will NOT enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services. These antennas are ONLY for the 5,000 ATT customers (unless ATT rents additional to other carriers). The size and location of this electric structure is more likely to cause an emergency: fire in strong winds and Glen Canyon's terrain and dry grass vegetation. ATT insists they need this antenna structure for FIRST NET. Fire Chief Crispin and Police Lt from Ingleside station attest that their First Responders are not required to use First NET AND FirstNET technology has booster for low signal areas.

16. Planning Code Section 101.1(b) establishes **eight priority-planning policies and requires review of permits for consistency with said policie**s. "On balance, the project complies with said policies in that: A. That **existing neighborhood-serving retail uses be preserved and enhanced and future opportunities** for resident employment in and ownership of such businesses be enhanced. The wireless communications network will enhance personal communication services for businesses and customers in the surrounding area."
This is untrue! The surrounding retail businesses are stores, post office, cafes - this has nothing to do with enhancing business and customers.
B. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.
This is untrue. The cultural character of this neighborhood is the recreating and enjoying nature in Christopher Playground and Glen Canyon Park. These "cultural characteristics" will be profoundly altered by placing a 10 story antenna complex at the edge of these two parks."
"No **residential uses will be displaced or altered** in any way by the granting of this Authorization."
Again untrue: ***looking out onto a park or canyon from one's residence IS A RESIDENTIAL USE, being in close proximity to a park is a residential use BOTH will be replaced by an ugly giant structure 20 feet above the tree line.***

C. That the City's supply of affordable housing be preserved and enhanced, "The Project will have no adverse effect on housing in the vicinity".
On the contrary, the project will increase property insurance premiums and will decrease property values resulting in unaffordable rents and/or unrentable units

E. That a diverse economic base be maintained by **protecting our industrial and service sectors** from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these **sectors be enhanced. "**

The Project will not cause any displacement of industrial and service sector activity."
TRUE BECAISE this is not an industrial service area it's a residential area with a playground and a park.

F. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake. "The Project will be designed and will be constructed to conform to the structural and seismic safety requirements of the Building Code. This proposal will not impact the property's ability to withstand an earthquake".
Does the building code have seismic safety requirements for 104 foot towers loaded with heavy electrical equipment alongside a 109-gallon diesel fuel tank and generator? Located very close to the edge of a landslide zone on infil and known "slipping" of the Police Academy?

H. That our **parks and open space and their access to sunlight and vistas be protected from development. "**Although the Project does cast additional shadow on two adjacent public parks(George Christopher Playground and Glen Canyon Park), both parks are still afforded access to sunlight, and any additional shadows should not dramatically affect the use and enjoyment of either park. A study of the shadow impacts as required per Planning Code Section 295was completed. The Recreation and Park Commission reviewed the shadow analysis and issued a resolution recommending to the Planning Commission that the Project will not have significant adverse impact on the use of either park".
Kids don't just need sunlight, they need nature. It will have significant adverse impact on the vistas from above and within the playground and Glen Canyon Park. The natural vistas provide solace and peace and will be scarred by an ugly giant mechanical spaceship like structure <u>on top of the trees</u> and bulky equipment along the border of the playground and park.

17. The Project is consistent with and would promote the general and specific purposes of the Code provided under Section 101.1(b) in that, "**as designed, the Project would contribute to the character and stability of the neighborhood** and would constitute a beneficial development.*"*
This is NOT true it will detract from the aesthetics, character and stability of the neighborhood. It is NOT a beneficial development

18. The Commission hereby finds that approval of the Conditional Use Authorization would promote the health, safety and welfare of the City. ***NO!It will endanger the health, safety, of the residents as previously described and decrease the tax base as property values decrease.***

Commission's Guidelines on where facilities should be located:

In the Executive Summary it states that "The Commission's guidelines on where facilities should be located include:

3. Industrial or Commercial Structures: buildings such as warehouses, factories, garages, service stations.

AGREE

4. Industrial or Commercial Structures: buildings such as supermarkets, retail stores, banks; and

AGREE

5. Mixed-Use Buildings in High Density Districts: buildings such as housing above commercial or other non-residential space.

AGREE

The proposed location meets none of these priority guidelines for location.

A 10story antenna behind a building used for educating our police force (aka an adult school), on the edge of a playground, at the top of one of the two wild open spaces (where there is acute fire danger) in San Francisco used by hikers, and dog walkers, and home to diverse wildlife, does not comply with the Commission's guidelines.

The "guidelines also state that applications for Preference 5 or below Location Sites unless the application describes (a) what publicly-used building, co-location site or other Preferred Location Sites are located within the geographic service area; **NO** b) what good faith efforts and measures were taken to secure these more Preferred Locations, **ATT identified 6 locations they considered but NO alternative antenna systems** (c) explains why such efforts were unsuccessful; and (d) demonstrates that the location for the site is essential to meet demands in the geographic service area and the Applicant's citywide networks. **The demands do not require such a massive structure they can be satisfied with distributed antennas and not interfere with neighborhood parks, views and residences.**

The answer to these stipulations did not appear in the application

Who is liable should a fire be caused by this facility?
Has ATT presented a master plan as required regarding new networks in the City? Has the Planning Commission approved such a plan including all carriers?

The materials p. T2 describe diesel fuel and include signage on the chain link fence that states "caution RF (non-ionizing radiation) fields may exceed FCC general population limits" and "entering an area where RF fields may exceed FCC general population limits."
This facility is literally in the Police Academy parking area and next to a building that is in use.
How large is the area where RF emissions might exceed the FCC limits?
Has and will the City measured RF in the vicinity before and will the city measure regularly unannounced after if the project is approved.
Is the Health Department or ATT responsible for ensuring the cell towers are compliant with FCC's outdated (1996 and much has changed since then) limits? Will safety checks be made unannounced at different times of the day at least once a year and be publicly reported?
Will there be an emergency number staffed 24/7 posted? How long will an electrical fire of this magnitude be powered down before water can be applied
If there is a fire, and or people or children are sickened or injured by any part of this project, who will bear the health costs?
Does ATT have insurance to cover liabilities from health damages and/or property damages? It's my understanding that ATT Mobile Insurance states that coverage is excluded for pollutants which are defined as "any solid, liquid, gaseous or thermal irritant or contaminant including smoke, vapor, soot, fumes, acid, alkalis, chemicals, artificially produced electric fields, magnetic field, electromagnetic field, sound waves, microwaves and all artificially produced ionizing or non-ionizing radiation and waste. Does the Planning Commission intend for the City to assume these liability risks?

Telecom facilities are highly complex structures, and highly dangerous. I respectfully request that members of the Board of Supervisors carefully analyze both the risks to the community and the degradation of the neighborhood main attraction: the parks and views, by placing a giant structure (the height of a 10 story building holding bulky equipment) at the edge of our precious parks NEAR homes and blocking the vistas for the public and for homes. The California Supreme court has ruled that . ***The City has inherent local police power to determine the appropriate uses of land within its jurisdiction****. That power includes the authority to establish aesthetic conditions for land use.* ***This proposed telecom facility aka "monopole" will deter from the aesthetic enjoyment of our neighborhood.***

There are alternative locations and designs for better wireless coverage that will not ruin our neighborhood character and the natural beauty of our parks.

You have authority and I urge you to grant the appeal of this Conditional Use Approval, lest "FirstNET" and "weak signals" become the standard ATT excuse to invade neighborhoods with 10 story antenna towers to increase their market share.
Thank you for reading this and considering the precedent it is setting. The would be the first but not the last "over 100foot monopole and antenna structure" (which ATT declined to say they would not add more antennas to) in a zone for Open Space in a residential neighborhood and immediately adjacent to two well used public parks.

Sincerely a long time resident and public servant,



Catherine Dodd PhD RN
Former:
Director of Women's Health SFGH,
SF Health Commissioner,
Staff to Supervisors Walker & Shelley,
Deputy Chief of Staff to Mayor Newsom for Health and Human Services
Director of SF Health Service System (health benefits for employees, retirees and commissioners)
District Director Rep Nancy Pelosi

From: Herbert Lew
To: BOS Legislation, (BOS)
Subject: File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Monday, December 1, 2025 10:14:08 PM
Attachments: Opposed to the proposed project at 350 Amber Dr.pdf

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December 1, 2025

Dear Supervisors,

I am writing to request that you overturn the approval of AT&T's proposed massive antenna structure in our neighborhood. Please find attached the comments I submitted to the Planning Commission prior to the September 25 meeting—comments that were not acknowledged by 4 Commissioners at the hearing (there was a narrow 4–3 vote). These concerns remain highly relevant, and they explain why allowing this massive structure to proceed would be a serious mistake.

The proposed tower—roughly the height of a **10-story** building—would be the only antenna exceeding 100 feet in any residential neighborhood in our city. Our area is zoned for four-story structures, and existing antennas of comparable scale are located in **commercial** or **industrial** zones, or along freeways, near BART stations, or mounted on tall buildings. They are **not** placed directly next to parks or within quiet neighborhood canyons. Approving such an intrusive structure here would set a troubling and inappropriate precedent.

This installation is not *necessary*. There are alternative locations and less **intrusive** technologies that can address coverage needs for both AT&T customers and public-safety systems. AT&T has asserted that this tower is essential for "FIRST NET" coverage, yet First Responders are **not required** to use FIRST NET. The Commissioners were misled about this point, and the true motivation is AT&T's desire to expand its market share. AT&T has also stated it may add additional equipment or even additional carriers on this structure, increasing bulk, increasing weight, and increasing risks—particularly given our neighborhood's steep terrain, winds, and established wildfire-risk designation.

This project is also not *desirable* from a safety or environmental perspective. The site lies within a Wildfire/WUI zone and an area identified on the City's landslide-seismic hazard maps. A 100-foot steel monopole, 20 feet above the tree line, introduces new ignition and infrastructure-failure risks. It would also dramatically alter the character of a neighborhood known for open sky, natural views, and a cherished park and canyon ecosystem. Residents are deeply concerned about potential impacts to wildlife—including birds and insects—both from the industrial presence of such a structure and from increased radio-frequency emissions, which federal law does not evaluate using the same environmental criteria used for humans.

Put simply: this project is **desirable for AT&T**, but it is **not desirable** for the residents who live here, nor for the parks, open space, and natural features that define our neighborhood and bring our community together.

For all these reasons, I urge you to reject this unnecessary, undesirable, and intrusive tower, and to protect both public safety and the character of our residential neighborhood.

Sincerely,
Herbert Lew
951 Duncan St
San Francisco, CA 94131

Herbert Lew
951 Duncan Street
San Francisco, CA 94131

July 5, 2025

San Francisco Planning Commission
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103

Dear SF Planning Commissioners,

As a 47- year resident of the Diamond Heights neighborhood, I am writing in strong opposition to the proposed project at 350 Amber Drive that includes the installation of a new 104-foot tall monopole for a new AT&T Wireless Telecommunication Services
Facility adjacent to the SF Police Academy.

I am opposed to this project because of safety concerns for residents and children in that area. George Christopher Playground & Park and St. Nicholas Day Care Preschool is in very close proximity to the proposed project. This project proposes the installation of electrical equipment, a 190 gallon diesel fuel tank and generator at the base of a tree grove. These trees are known to shed large branches during strong winds, posing a major fire hazard if any debris strikes the macro tower.

Wireless antennas have been associated with fire outbreaks during wind events in states like California and Colorado. There's also the potential for an earthquake to bring the tower down, with a 104-foot fall zone that would put nearby areas—including the playground, canyon, tennis courts, and preschool—at risk.

In addition, this proposed 104-foot tall antenna will significantly alter the visual character of the neighborhood and degrade property value.

I hope you will take into consideration some of the concerns I have noted above and consider an alternative non-residential location for your proposed project.

Thank you for your consideration,

Herbert Lew

From:	David Dai
To:	BOS Legislation, (BOS); MandelmanStaff (BOS)
Cc:	So, Lydia (CPC); Dacey, John (CPC); Vladimir Kostyukov; Daniel Schereck; Catherine Dodd; RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Pollak, Josh (CPC); BOS-Supervisors; BOS-Legislative Aides
Subject:	File No. C251098 - Appeal: Conditional Authorization Use of 350 Amber Dr Monopole
Date:	Monday, December 1, 2025 9:41:42 PM
Attachments:	Opposition to AT&T Monopole 2024-004318CUASHD - David Dai.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,

I am writing to voice my opinion against the AT&T Monopole to be built at 350 Amber Dr. I am a resident of the 200-block of Amber Dr, which would be less than 100 feet away from this ridiculous fire hazard and corporate monstrosity.

Please find attached my comments, which were made to the Planning Commission before the September 25 meeting and were unacknowledged by four of the Commissioners at the Sept 25 hearing (vote was 4:3). My comments are even more relevant today, and are important reasons why the approval of this massive antenna structure must be overturned. An antenna of this size (104 feet), in a neighborhood where everything is zoned for no more than 40 feet, belongs in a commercial or industrial area with much less population density. The commissioners would be setting a terrible precedent as this would be the only antenna over 100 feet in a residential neighborhood (while existing ones are only in commercial areas). Furthemore, this structure would overlook Glen Canyon Park and George Christopher Playground, and two preschools that are within 100 feet of this monstrosity. Why would the Planning Commission be negligent and approve an intrusive structure here, when all other antennas are near freeways or attached to tall buildings away from residential areas?

This huge electric structure will be 20 feet above the treeline, and is not necessary, as there are alternative locations in industrial areas with less instructive antenna systems to boost First Net. The Planning Commissioners had falsely cited this as their excuse to approve the structure, but our Fire Chief and local Police Captains have disproved this on the record to say that they don't require First Responders to use First Net. The Planning Commissioners were falsely misled by AT&T, and I would urge more inter-department collaboration instead of following the financial motives of AT&T. None of the other cell carriers needed to install an antenna here, and this is purely an attempt by AT&T to increase their revenues at the personal impacts of everyone that lives in Diamond Heights, the children that play at George Christopher Playground, and all beings that enjoy Glen Canyon Park recreationally. AT&T has also recently stated they would add more antennas to the proposed structure, which would even carry greater risk beyond the original approval.

Finally, this AT&T Monopole is not desirable from a safety perspective, **as it's identified as a major fire risk in a Wildfire / Wildland Urban Interface area, and is in an area identified on the SF landslide / seismic hazard map.** Imagine the risk of a massive fire from AT&T's 190 gallon diesel tank, in an area prone to earthquakes, high winds, landslides --- next to a large city park filled with trees and dry grassland surrounded by residential houses. That's on

top of the two preschools and children's playground that are located 100 feet from this, which would be the first areas that would be impacted.

Undoubtedly, this is an AT&T initiative to help their bottom line, and is undesirable at the expense of residents in our neighborhood who rely on our parks to bring the community together.

I highly urge the Supervisors to overturn the Planning Commission's approval of the AT&T monopole, so they act in the best interest of the Diamond Heights community and the many voting residents that y'all represent. Thank you for your time!

Cheers,
David Dai

David S. Dai
Resident of the 200-block on Amber Dr

To:
Supervisor Mandelman and SF Planning Commission

I am writing to you as a concerned resident who lives on the 200-block of Amber Drive, a few houses down away from the newly proposed project for AT&T Wireless. **I strongly oppose the new project: "2024-004318CUASHD" for the installation of the 104-foot tall monopole for a new AT&T Wireless Telecommunication facility.**

This project of 12 new antennas, 9 remote radio units, and ancillary equipment would greatly affect the safety, aesthetic, general recreational use, quality of outdoor life, environmental impacts, and overall welfare of all nearby residents, children at nearby schools, and all that visit George Christopher Playground (children playground, park, baseball field, tennis court), Glen Canyon Park, and the entire Diamond Heights neighborhood.

I am strongly opposed to this project for the reasons below and strongly urge the planning committee to reject this project and proposal. The installation of this monstrous monopole is both negligent and ill-considered, with significant consequences to residents and the nearby community. I have attached photos showing the neighborhood impact of this.

1) Safety and Recreation Concerns, especially for our children at the two adjacent preschools

- Proposed 104-foot monopole is directly next to George Christopher Playground, where hundreds of children gather during the day for playtime, baseball games, soccer practice, and summer camps.
- Two schools: the St. Nicholas Day Care Preschool and the Noe Valley Nursery School where many kids attend throughout the year are within 100 yards of this proposed monopole
- Tree Frog Treks, a Mission-based summer camp holds full day summer camps in the field right next to where this monopole is proposed to be built: https://www.treefrogtreks.com/glencanyon
    - The motto of Tree Frog Treks is literally: "Get Out, Get Dirty" to encourage our children to play outside in the nearby park and dirt where the proposed monopole will be.
- Having such significant electronic equipment would be pose safety concerns for children that gather and play daily around the monopole

2) Safety Concerns, fire and other natural risks at top of Glen Canyon Park

- Proposed 104-foot monopole will be built next to many non-native eucalyptus trees and at the top of Glen Canyon Park trailhead. This is a large city park with dry grasses and trees that would subject the area and neighbors to significant wildfire risk in case of any equipment failures. There are currently minimal electric structures in our neighborhood because of this (no above ground power lines, no comms equipment)
- High winds in the area since we're at the top of Glen Canyon in Diamond Heights would exacerbate both the location of this monopole and risk to nearby neighborhoods

3) Aesthetic and Neighborhood Character Concerns

- Proposed 104-foot monopole would greatly deteriorate the aesthetic of this residential neighborhood with an industrial installation. This is a densely populated, residential neighborhood with residents that enjoy the pleasures of living next to and with a view of Glen Canyon Park and the George Christopher Playground in all its greenery. This is a recreational area, not the place for an industrial installation.

4) Environmental Concerns

- Outside of the obvious fire and wind risk for the location, the monopole is adjacent to our Diamond Heights Community Garden and also Glen Canyon Park. This is the home of many birds, animals, and insect pollinators that will be disrupted by the electromagnetic fields and result in dead migratory birds around our neighborhood.

5) Decline in Property Value

- Building such an industrial monstrosity would strongly impact the property values of homes within the Diamond Heights area because of its safety concerns, environmental risks, and ugly aesthetic to a green neighborhood. Similar industrial projects around SF have caused similar declines of property values that would be impacted by poor decision-making and poor planning.

6) Alternative Locations

- Diamond Heights is a densely populated, residential zone where this 104-foot monopole does not belong. Consequences that would affect the recreational concerns and safety of SF preschool children, directly impact the welfare of the residents, and adversely destroy the aesthetic and character of our neighborhood and wonderful parks. The proposed monopole should be in other downtown commercial zones or near utility municipal buildings that allow for 85-120 ft baseline heights. There is an obvious reason why no such structures exist today in our neighborhood.

I strongly implore the Planning Commission to reject and seek alternatives to this project. I am happy to speak in person and answer any questions as an impacted resident.

Kind Regards,

David Dai

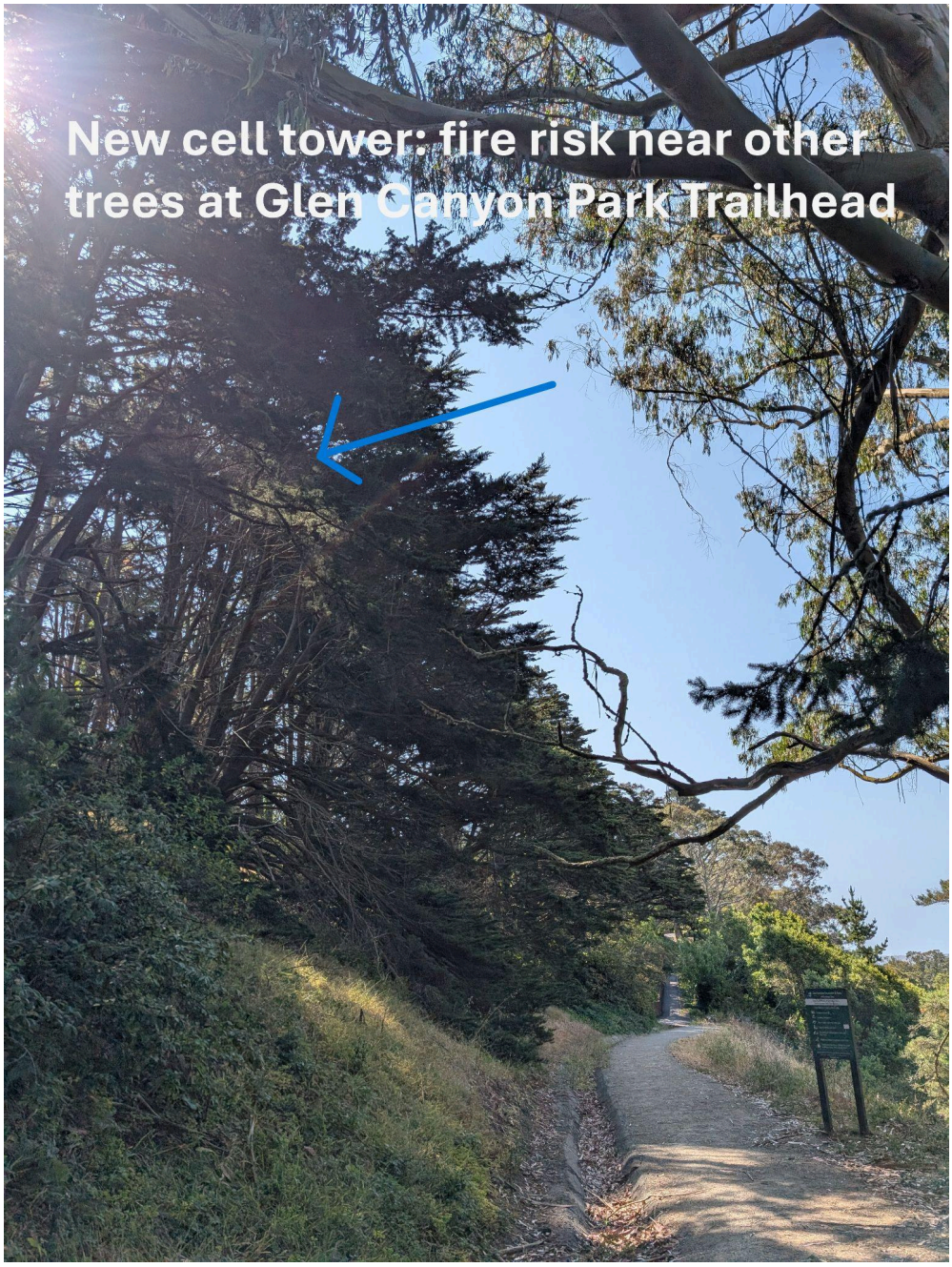
272 Amber Dr
San Francisco, CA 94131

Photo Exhibits of Neighborhood Impacts:


Location of new cell tower
Police Academy
KIDS ONLY
Christopher Playground on a Saturday


Location of new cell tower
Christopher Playground, Tree Frog Treks summer camp before kids arrive


Location of
monstrous AT&T
Monopole
Keep Dogs on Leash
Dog Walkers Must Remove
Dog Waste
No Alcohol or
Glass Containers
tree frog trek
SUMMER CAMP
Get Out & Get Dirty
COYOTE
ALERT
Children's
Summer camp
and nearby park
wildfire impact


New cell tower: fire risk near other trees at Glen Canyon Park Trailhead

From: Selena Lew
To: BOS Legislation, (BOS)
Subject: File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Monday, December 1, 2025 9:06:52 PM

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December 1, 2025

Dear Supervisors,

I am writing to request that you overturn the approval of AT&T's proposed massive antenna structure in our neighborhood. Please find attached the comments I submitted to the Planning Commission prior to the September 25 meeting—comments that were not acknowledged by 4 Commissioners at the hearing (there was a narrow 4–3 vote). These concerns remain highly relevant, and they explain why allowing this massive structure to proceed would be a serious mistake.

The proposed tower—roughly the height of a **10-story** building—would be the only antenna exceeding 100 feet in any residential neighborhood in our city. Our area is zoned for four-story structures, and existing antennas of comparable scale are located in **commercial** or **industrial** zones, or along freeways, near BART stations, or mounted on tall buildings. They are **not** placed directly next to parks or within quiet neighborhood canyons. Approving such an intrusive structure here would set a troubling and inappropriate precedent.

This installation is not *necessary*. There are alternative locations and less **intrusive** technologies that can address coverage needs for both AT&T customers and public-safety systems. AT&T has asserted that this tower is essential for "FIRST NET" coverage, yet First Responders are **not required** to use FIRST NET. The Commissioners were misled about this point, and the true motivation is AT&T's desire to expand its market share. AT&T has also stated it may add additional equipment or even additional carriers on this structure, increasing bulk, increasing weight, and increasing risks—particularly given our neighborhood's steep terrain, winds, and established wildfire-risk designation.

This project is also not *desirable* from a safety or environmental perspective. The site lies within a Wildfire/WUI zone and an area identified on the City's landslide-seismic hazard maps. A 100-foot steel monopole, 20 feet above the tree line, introduces new ignition and infrastructure-failure risks. It would also dramatically alter the character of a neighborhood known for open sky,

natural views, and a cherished park and canyon ecosystem. Residents are deeply concerned about potential impacts to wildlife—including birds and insects—both from the industrial presence of such a structure and from increased radio-frequency emissions, which federal law does not evaluate using the same environmental criteria used for humans.

Put simply: this project is **desirable for AT&T**, but it is **not desirable** for the residents who live here, nor for the parks, open space, and natural features that define our neighborhood and bring our community together.

For all these reasons, I urge you to reject this unnecessary, undesirable, and intrusive tower, and to protect both public safety and the character of our residential neighborhood.

Sincerely,
Selena Lew
951 Duncan St
San Francisco, CA 94131

San Francisco Planning Commission
c/o Chair Lydia So and Members;
Moore, Braun, Campbell, Imperial, McGarry
and Williams and the Commission Executive
Director and Secretary
49 South Van Ness Avenue
San Francisco, CA 94103

July 5, 2025

Dear SF Planning Commissioners,

As a 43- year resident of the Diamond Heights neighborhood, I am writing in strong opposition to the proposed project at 350 Amber Drive that includes the installation of a new 104-foot tall monopole for a new AT&T Wireless Telecommunication Services
Facility adjacent to the SF Police Academy.

I am opposed to this project because of safety concerns for residents and children in that area. George Christopher Playground & Park and St. Nicholas Day Care Preschool is in very close proximity to the proposed project. This project proposes the installation of electrical equipment, a 190 gallon diesel fuel tank and generator at the base of a tree grove. These trees are known to shed large branches during strong winds, posing a major fire hazard if any debris strikes the macro tower.

Wireless antennas have been associated with fire outbreaks during wind events in states like California and Colorado. There's also the potential for an earthquake to bring the tower down, with a 104-foot fall zone that would put nearby areas—including the playground, canyon, tennis courts, and preschool—at risk.

In addition, this proposed 104-foot tall antenna will significantly alter the visual character of the neighborhood and degrade property value.

I hope you will take into consideration some of the concerns I have noted above and consider an alternative non-residential location for your proposed project.

Thank you for your consideration,

Selena Lew

Selena Lew
951 Duncan Street
San Francisco, CA 94131

From: erica lew
To: BOS Legislation, (BOS)
Subject: File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Monday, December 1, 2025 8:39:13 PM
Attachments: Opposed to the proposed project at 350 Amber Drive.pdf

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December 1, 2025

Dear Supervisors,

I am writing to request that you overturn the approval of AT&T's proposed massive antenna structure in our neighborhood. Please find attached the comments I submitted to the Planning Commission prior to the September 25 meeting—comments that were not acknowledged by 4 Commissioners at the hearing (there was a narrow 4–3 vote). These concerns remain highly relevant, and they explain why allowing this massive structure to proceed would be a serious mistake.

The proposed tower—roughly the height of a **10-story** building—would be the only antenna exceeding 100 feet in any residential neighborhood in our city. Our area is zoned for four-story structures, and existing antennas of comparable scale are located in **commercial** or **industrial** zones, or along freeways, near BART stations, or mounted on tall buildings. They are **not** placed directly next to parks or within quiet neighborhood canyons. Approving such an intrusive structure here would set a troubling and inappropriate precedent.

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This project is also not *desirable* from a safety or environmental perspective. The site lies within a Wildfire/WUI zone and an area identified on the City's landslide-seismic hazard maps. A 100-foot steel monopole, 20 feet above the tree line, introduces new ignition and infrastructure-failure risks. It would also dramatically alter the character of a neighborhood known for open sky, natural views, and a cherished park and canyon ecosystem. Residents are deeply concerned about potential impacts to wildlife—including birds and insects—both from the industrial presence of such a structure and from increased radio-frequency emissions, which federal law does not evaluate using the same environmental criteria used for humans.

Put simply: this project is **desirable for AT&T**, but it is **not desirable** for the residents who live here, nor for the parks, open space, and natural features that define our neighborhood and bring our community together.

For all these reasons, I urge you to reject this unnecessary, undesirable, and intrusive tower, and to protect both public safety and the character of our residential neighborhood.

Sincerely,
Erica Po Lew
951 Duncan St
San Francisco, CA 94131

Erica Po Lew
951 Duncan Street
San Francisco, CA 94131

July 5, 2025

San Francisco Planning Commission
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103

Dear SF Planning Commissioners,

As a 47- year resident of the Diamond Heights neighborhood, I am writing in strong opposition to the proposed project at 350 Amber Drive that includes the installation of a new 104-foot tall monopole for a new AT&T Wireless Telecommunication Services
Facility adjacent to the SF Police Academy.

I am opposed to this project because of safety concerns for residents and children in that area. George Christopher Playground & Park and St. Nicholas Day Care Preschool is in very close proximity to the proposed project. This project proposes the installation of electrical equipment, a 190 gallon diesel fuel tank and generator at the base of a tree grove. These trees are known to shed large branches during strong winds, posing a major fire hazard if any debris strikes the macro tower.

Wireless antennas have been associated with fire outbreaks during wind events in states like California and Colorado. There's also the potential for an earthquake to bring the tower down, with a 104-foot fall zone that would put nearby areas—including the playground, canyon, tennis courts, and preschool—at risk.

In addition, this proposed 104-foot tall antenna will significantly alter the visual character of the neighborhood and degrade property value.

I hope you will take into consideration some of the concerns I have noted above and consider an alternative non-residential location for your proposed project.

Thank you for your consideration,

Erica Po Lew

Erica Po Lew

From: jshan1@yahoo.com
To: BOS Legislation, (BOS)
Subject: File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Monday, December 1, 2025 8:34:33 PM
Attachments: Opposition to the proposed project at 350 Amber Dr.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

December 1, 2025

Dear Supervisors,

I am writing to request that you overturn the approval of AT&T's proposed massive antenna structure in our neighborhood. Please find attached the comments I submitted to the Planning Commission prior to the September 25 meeting—comments that were not acknowledged by 4 Commissioners at the hearing (there was a narrow 4–3 vote). These concerns remain highly relevant, and they explain why allowing this massive structure to proceed would be a serious mistake.

The proposed tower—roughly the height of a **10-story** building—would be the only antenna exceeding 100 feet in any residential neighborhood in our city. Our area is zoned for four-story structures, and existing antennas of comparable scale are located in **commercial** or **industrial** zones, or along freeways, near BART stations, or mounted on tall buildings. They are **not** placed directly next to parks or within quiet neighborhood canyons. Approving such an intrusive structure here would set a troubling and inappropriate precedent.

This installation is not *necessary*. There are alternative locations and less **intrusive** technologies that can address coverage needs for both AT&T customers and public-safety systems. AT&T has asserted that this tower is essential for "FIRST NET" coverage, yet First Responders are **not required** to use FIRST NET. The Commissioners were misled about this point, and the true motivation is AT&T's desire to expand its market share. AT&T has also stated it may add additional equipment or even additional carriers on this structure, increasing bulk, increasing weight, and increasing risks—particularly given our neighborhood's steep terrain, winds, and established wildfire-risk designation.

This project is also not *desirable* from a safety or environmental perspective. The site lies within a Wildfire/WUI zone and an area identified on the City's landslide-seismic hazard maps. A 100-foot steel monopole, 20 feet above the tree line, introduces new ignition and infrastructure-failure risks. It would also dramatically alter the character of a neighborhood known for open sky, natural views, and a cherished park and canyon ecosystem. Residents are deeply concerned about potential impacts to wildlife—including birds and insects—both from the industrial presence of such a structure and from increased radio-frequency emissions, which federal law does not evaluate using the same environmental criteria used for humans.

Put simply: this project is **desirable for AT&T**, but it is **not desirable** for the residents who live here, nor for the parks, open space, and natural features that define our neighborhood and bring our community together.

For all these reasons, I urge you to reject this unnecessary, undesirable, and intrusive tower, and to protect both public safety and the character of our residential neighborhood.

Sincerely,
Jackie Shan

949 Duncan St
San Francisco, CA 94131

Jackie Shan
949 Duncan Street
San Francisco, CA 94131
July 5, 2025

San Francisco Planning Commission
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103

Dear SF Planning Commissioners,

I am a resident in the Diamond Heights neighborhood and will raise my children here. I am writing in strong opposition to the proposed project at 350 Amber Drive that includes the installation of a new 104-foot tall monopole for a new AT&T Wireless Telecommunication Services Facility adjacent to the SF Police Academy.

I am opposed to this project because of safety concerns for residents and children in that area. George Christopher Playground & Park and St. Nicholas Day Care Preschool is in very close proximity to the proposed project. This project proposes the installation of electrical equipment, a 190 gallon diesel fuel tank and generator at the base of a tree grove. These trees are known to shed large branches during strong winds, posing a major fire hazard if any debris strikes the macro tower.

Wireless antennas have been associated with fire outbreaks during wind events in states like California and Colorado. There's also the potential for an earthquake to bring the tower down, with a 104-foot fall zone that would put nearby areas—including the playground, canyon, tennis courts, and preschool—at risk.

In addition, this proposed 104-foot tall antenna will significantly alter the visual character of the neighborhood and degrade property value.

I hope you will take into consideration some of the concerns I have noted above and consider an alternative non-residential location for your proposed project.

Thank you for your consideration,

Jackie Shan

From: Jessica Lew
To: BOS Legislation, (BOS)
Subject: File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Monday, December 1, 2025 8:29:25 PM
Attachments: Opposition to the proposed project at 350 Amber Drive.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

December 1, 2025

Dear Supervisors,

I am writing to request that you overturn the approval of AT&T's proposed massive antenna structure in our neighborhood. Please find attached the comments I submitted to the Planning Commission prior to the September 25 meeting—comments that were not acknowledged by 4 Commissioners at the hearing (there was a narrow 4–3 vote). These concerns remain highly relevant, and they explain why allowing this massive structure to proceed would be a serious mistake.

The proposed tower—roughly the height of a **10-story** building—would be the only antenna exceeding 100 feet in any residential neighborhood in our city. Our area is zoned for four-story structures, and existing antennas of comparable scale are located in **commercial** or **industrial** zones, or along freeways, near BART stations, or mounted on tall buildings. They are **not** placed directly next to parks or within quiet neighborhood canyons. Approving such an intrusive structure here would set a troubling and inappropriate precedent.

This installation is not *necessary*. There are alternative locations and less **intrusive** technologies that can address coverage needs for both AT&T customers and public-safety systems. AT&T has asserted that this tower is essential for "FIRST NET" coverage, yet First Responders are **not required** to use FIRST NET. The Commissioners were misled about this point, and the true motivation is AT&T's desire to expand its market share. AT&T has also stated it may add additional equipment or even additional carriers on this structure, increasing bulk, increasing weight, and increasing risks—particularly given our neighborhood's steep terrain, winds, and established wildfire-risk designation.

This project is also not *desirable* from a safety or environmental perspective. The site lies within a Wildfire/WUI zone and an area identified on the City's landslide-seismic hazard maps. A 100-foot steel monopole, 20 feet above the tree line, introduces new ignition and infrastructure-failure risks. It would also dramatically alter the character of a neighborhood known for open sky, natural views, and a cherished park and canyon ecosystem. Residents are deeply concerned about potential impacts to wildlife—including birds and insects—both from the industrial presence of such a structure and from increased radio-frequency emissions, which federal law does not evaluate using the same environmental criteria used for humans.

Put simply: this project is **desirable for AT&T**, but it is **not desirable** for the residents who live here, nor for the parks, open space, and natural features that define our neighborhood and bring our community together.

For all these reasons, I urge you to reject this unnecessary, undesirable, and intrusive tower, and to protect both public safety and the character of our residential neighborhood.

Sincerely,
Jessica Lew
949 Duncan St
San Francisco, CA 94131

Jessica Lew
949 Duncan Street
San Francisco, CA 94131

July 5, 2025

San Francisco Planning Commission
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103

Dear SF Planning Commissioners,

I have resided in the Diamond Heights neighborhood for 35 years. As a long time resident of Diamond Heights, I am writing in strong opposition to the proposed project at 350 Amber Drive that includes the installation of a new 104-foot tall monopole for a new AT&T Wireless Telecommunication Services Facility adjacent to the SF Police Academy.

I am opposed to this project because of safety concerns for residents and children in that area. George Christopher Playground & Park and St. Nicholas Day Care Preschool is in very close proximity to the proposed project. This project proposes the installation of electrical equipment, a 190-gallon diesel fuel tank and generator at the base of a tree grove. These trees are known to shed large branches during strong winds, posing a major fire hazard if any debris strikes the macro tower.

Wireless antennas have been associated with fire outbreaks during wind events in states like California and Colorado. There's also the potential for an earthquake to bring the tower down, with a 104-foot fall zone that would put nearby areas—including the playground, canyon, tennis courts, and preschool—at risk.

In addition, this proposed 104-foot tall antenna will significantly alter the visual character of the neighborhood and degrade property value.

I hope you will take into consideration some of the concerns I have noted above and consider an alternative non-residential location for your proposed project.

Thank you for your consideration,

Jessica Lew

From: MARK MILES
To: BOS Legislation, (BOS)
Subject: AT&T's Proposed Megatower in the residential neighborhood of Diamond Heights!
Date: Monday, December 1, 2025 7:20:17 PM
Attachments: SF Planning Commission.docx

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the Board of Supervisors,

Please find my attached letter which was sent by mail to the Planning Commission in July. It was part of a very large packet of letters and highly important information submitted to Commissioners at their Sept 25 meeting. I was in attendance, along with dozens of concerned neighbors, and it was very worrying that four of the Commissioners at the hearing appeared to have **not reviewed** the material (the vote was 4:3). T**here are highly relevant and important reasons why the approval of this massive antenna structure must be overturned**. An antenna of this size (10 stories) in a neighborhood zoned for four stories, belongs in a commercial or industrial area NOT in a residential neighborhood. This would be the only antenna over 100 feet tall in a residential neighborhood, the 2 existing antennas are in commercial areas. Other tall (but not reaching 100') antennas are near freeways, BART stations, or attached to tall buildings and NOT adjacent to parks.

This huge electric structure which will be 20' above the tree line, is not **"necessary,"** as there **are alternative locations and less intrusive antenna systems** *and* alternative ways to boost "FIRST NET" (for First Responders) – which was the reason 4 of the Planning Commissioners cited as their excuse to approve the structure. **For the record: Police and Fire do not require First Responders to use FIRST NET, the Commissioners were misled by AT&T.** AT&T wants this massive structure to increase their market share AND to likely add a second layer of large and unsightly antennas to other carriers on this structure – **they recently stated they would not rule out adding more antennas (making the structure heavier, more bulky and a greater risk for landslides and fire in our windy neighborhood).**

It is highly risky from a safety perspective, as it is a major fire risk in an Wildfire/Wildland Urban Interface Area and is an area identified on the SF Landslide-Seismic hazard map. It will change the character of the neighborhood known for its open skies, nature and views of the playground and canyon. The danger of fire and exposure to Radio Frequency Radiation is highly undesirable for the wildlife in the canyon, flora and birds and insects and according to the 1996 Telecommunications Act RFR standards are not considered under the definition of

“environment” the way humans are, in fact RFR affects avian life at a much lower frequency than humans not to mention antenna collisions to a massive tower built in the middle of a forest.

Undoubtedly this is *desirable* for AT&T to enhance their corporate coffers, but it is **NOT** desirable at the expense of residents in a neighborhood whose parks and nature bring us together. As well, it is known that the installation of these towers has an extremely negative impact on property values.

I beg of you, along with scores of concerned Diamond Heights property owners and tenants, to please rule again the construction of this monstrosity in one of the most beautiful planned communities in San Francisco.

Respectfully yours,
Mark Miles

940 Duncan Street, D205
San Francisco, CA 94131
415-350-3765

July 10,2026

SF Planning Commission
Attn: Lydia So and Members
49 S. Van Ness Avenue
San Francisco, CA 94103

To all members of the SF Planning Commission,

I am writing to express my tremendous concern over the proposed 10-story tower that AT&T wishes to erect in our residential neighborhood. As a Diamond Heights homeowner of 23 years, I can't even fathom how dramatically this behemoth will spoil the beauty of our environment. This area has always been a refuge from the intensity of the city and a place known for its exceptional views, so to place this towering giant near a children's playground, a preschool, dog park and our treasured Glen Canyon will have a devastating effect. There are obvious safety concerns, as a major quake is long overdue, and the fall radius of this tower will be 104 feet. Aside from seismic and safety concerns, this incredibly intrusive eye sore will affect property values, which are already stressed, and create a visual blight that will inflict harm on our community for years. Such a dramatically over scaled structure does not belong in a neighborhood in which houses are modestly sized in order to preserve the views. What makes Diamond Heights so exceptional will be greatly damaged by the construction of this obscenely tall commercial tower.

I'm sure that with all of its money and engineering prowess, AT&T can come up with a more thoughtful and creative solution that won't damage the desirability and safety of our neighborhood.

Please say no to AT&T and their clear disrespect for the environment and the quality of life for residents of Diamond Heights.

Sincerely,
Mark Miles

940 Duncan Street, D205
San Francisco, CA 94131
415-350-3765

From: Chanda Williams
To: BOS Legislation, (BOS); Jamie Litchmann
Subject: Comments on File No. C251098
Date: Monday, December 1, 2025 6:02:10 PM
Attachments: SF.BoS.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please see attached pdf letter regarding opposition to AT&T's proposed monopole in my neighborhood.

Thank you for your attention.
Chanda Williams

chanda | chandawilliamsdesign.com

Chanda Williams
130 Amber Drive
San Francisco, CA 94131

San Francisco Board of Supervisors
49 South Van Ness Avenue
San Francisco, CA

November 30, 2025

To the Honorable Members of the San Francisco Board of Supervisors,

Is it not the job of our elected city officials to represent the safety and interests of its constituents, rather than help line the pockets of a billion-dollar company?

While it has been determined we could use better cell coverage in our area there are other, **SAFER** and less intrusive systems and locations that could achieve that goal rather than their proposed 10-story monopole.

It may cost AT&T more but certainly if the goal is better coverage for their users (as opposed to making the monstrosity even taller so they can rent coverage to all the other cell providers) they should be able to offer alternatives to this plan that would protect our lives, homes and home insurance policies.

Attached is the letter I sent earlier this year to The Planning Commission in opposition to the AT&T Monopole Cell Tower.

Thank you for your attention,



Chanda Williams
415 269 3087

Chanda Williams
130 Amber Drive
San Francisco, CA 94131

San Francisco Planning Commission
49 South Van Ness Avenue, Suite 1400
San Francisco, CA

July 1, 2025

To the Honorable Members of the San Francisco Planning Commission,

I have been a home owner at 130 Amber Drive in Diamond Heights for almost 25 years.

Our neighborhood with its tightly-spaced, smaller homes and proximity to nature has created an intimate, friendly environment for young families as well as senior citizens.

These qualities make a new AT&T monotower a dangerous proposition. Besides the unattractive tower, the accompanying 190-gallon fuel tank and generator is my biggest concern.

Having been in the vicinity at the time of both the 2017 Napa fires and the recent Palisades Fire in Los Angeles I have seen first hand how quickly a fire can move and the devestation caused.

Has anyone from AT&T has spent time in our neighborhood to understand how windy it is? Glen Canyon is full of dry, combustible material and a variety of wildlife.

Our single family homes are connected with almost no surrounding yard space. These homes as well as the condominium and apartment complexes including the new Habitat for Humanity units are wood construction and would combust very quickly.

Does AT&T have safety plans for these issues? Will they help out when our fire insurance increases?

I fear that another telecom tower is going to cause younger families to leave our neighborhood and others looking to buy here fearful enough to avoid our area.

The resulting loss in property values (which seniors may be relying on to help in their later years) and loss of homeowner's insurance is not commensurate with the added cell coverage a new tower may bring. The current coverage is more than adequate.

I urge you to vote NO on this proposition.

Thank you for your attention,



Chanda Williams
415 269 3087

From: Meg Pirnie Kammerud
To: BOS Legislation, (BOS)
Subject: File No. C251098 – REJECT the CEQA Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Monday, December 1, 2025 3:47:51 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors:

I am writing today as a neighbor in Glen Park who lives across the street from Glen Canyon and has a garden plot in the Craggs Court Community Garden.

I support the cell tower proposed for Diamond Heights. While it may not be pretty, our city needs reliable cell coverage for emergencies, and frankly, the proposed location makes sense. There just aren't other places to build that would provide that level of coverage. I oppose additional delays and appeals of the project. CEQA is yet again being abused by our city residents, and that should not stand.

Kind regards,
Meg Kammerud

From:	Ed Kamrin
To:	BOS Legislation, (BOS)
Subject:	Request to Overturn Planning Commission Approval - 350 Amber Way Antenna Structure
Date:	Monday, December 1, 2025 3:30:46 PM
Attachments:	Planning Commission letter - Edward Kamrin.docx

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Request to Overturn Planning Commission Approval - 350 Amber Way Antenna Structure

Dear Supervisors,

I respectfully urge you to overturn the Planning Commission's 4-3 approval of the proposed antenna structure at 350 Amber Way, San Francisco. My attached comments remain relevant and outline why this approval should be reversed.

A 10-story antenna does not belong in a neighborhood zoned for four stories. This would be the only residential antenna exceeding 100 feet in height. Existing tall antennas are located in commercial areas, near freeways or BART stations, or on commercial buildings—not adjacent to residential parks.

The structure is not necessary. Alternative locations exist, as do less **intrusive** antenna systems and alternative methods to support FIRST NET. Notably, local Police and Fire Departments do not require first responders to use FIRST NET. AT&T has also declined to rule out adding additional carrier antennas, which would further increase the structure's bulk and risk.

The structure is not desirable for our community:

- The site sits within a Wildfire/Wildland Urban Interface Area and on SF's Landslide-Seismic hazard map, creating significant fire risk in a wind-prone area
- The 20-foot protrusion above the tree line would alter the neighborhood's character and its valued open skies and canyon views
- Wildlife faces both Radio Frequency Radiation exposure and collision risks from a tower of this scale in a forested area

I respectfully request that you reverse this approval and direct the applicant toward more appropriate locations that do not compromise residential safety and neighborhood character.

Sincerely,
Edward Kamrin

Edward Kamrin / 255 Red Rock Way H-301 / San Francisco, CA 94131 /
ekamrin@gmail.com

July 10, 2025

San Francisco Planning Commision
c/o Chair Lydia So and Members: Moore, Braun, Campbell, Imperial, McGarry and Williams and the Commission Executive Director and Secretary
49 Van Ness Ave.
San Francisco, CA 94103

Dear Chair, Members, Executive Director and Secretary of the Planning Commission:

As an 18-year resident owner of a condominium in the Diamond Heights neighborhood, I am alarmed at the AT&T Wireless Telecommunications Service Facility-Macro Tower proposed in the vicinity of 350 Amber Drive.

First, I have grave safety concerns. Wireless antennas have been linked to fires in high winds. In our already windy neighborhood, this is a real concern, particularly given the nearby old, non-native trees. As treasurer of the homeowners association for nearby Diamond Heights Village (396 units and 15 buildings on 7 acres), I know that our HOA has already faced great challenges obtaining property insurance, which doubled in cost over one year. This is a challenge we also face as individual unit owners. Concerns about fire safety are one of the reasons for these challenges, and the tower would only worsen the situation.

Second, I question the necessity for this solution. Does the tower truly meet the “least intrusive means” standard required by federal telecommunications law? This is not a location that would naturally conceal the tower through topography, vegetation, or other buildings. It is also not a design that blends with the environment. I would also question whether alternative solutions like distributed antenna systems or small cells can address the coverage gap and ask for an alternative proposal. Technology is developing rapidly, and AT&T should be incentivized to create less intrusive solutions.

Third, the solution disproportionately affects the neighborhood. Diamond Heights is a rare example of a planned community in San Francisco. Unlike most areas in San Francisco, it is one where some middle-class residents can purchase a home, typically the largest investment they will make in their lives. It is a neighborhood that includes renters and homeowners, Section 8 housing and owner-occupied dwellings, apartment buildings and freestanding homes.

Fourth, what unites this community is its natural beauty. Diamond Heights is a neighborhood of low-lying buildings and streets that follow the natural contours of the

landscape. Nor is its enjoyment limited to residents; people from all over the city and beyond visit Glen Canyon, now part of the Crosstown Trail. The recently updated Christopher Playground is a favorite of many families, including the children from across San Francisco who attend the three nearby preschools.

A ten-story tower is unthinkable in this environment. It is antithetical to the aesthetics of the community. It is likely to reduce home values and, most importantly, the quality of life for not only our neighbors, but all those who access the area.

In our digital age, connectivity is crucial. However, this is not the answer. As you examine this proposal, please consider the people and natural environment affected by it. AT&T can and should develop better solutions than the one presented here. Diamond Heights is not expendable. It is a vibrant community that deserves to be showcased, not blighted.

As a long-time resident and San Francisco voter and taxpayer, I add my voice to the others shared here. I urge you to reject the proposed project.

Sincerely,



Edward Kamrin
255 Red Rock Way, Unit H-301
San Francisco, CA 94131

From: Debby Nosowsky
To: BOS Legislation, (BOS)
Subject: File #C251098 - Do not approve siting of the 10 foot AT&T Tower
Date: Monday, December 1, 2025 2:53:50 PM
Attachments: AT&T Tower.docx

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Attached are my original comments on AT&T's request to place a 10 story tall wireless macro tower at the rear of the Police Academy at 350 Amber Drive. The tower would be the only antenna over 100 feet tall in a residential neighborhood, which also happens to be in a Wildfire/Wildland urban interface area and overlooks a nearby playground. In addition to my initial objects, I would add that this tower is not needed to boost FIRST NET; there are alternatives that are less intrusive than what AT&T is proposing, proposing I might add not to benefit first responders. In any event, neither police nor fire departments require first responders to use FIRST NET.

I urge you not to cave to corporate interests, but to maintain as your top priority, the health and safety of San Francisco residents.

July 17, 2025

John Dacey

San Francisco Planning Department

49 Van Ness Avenue

San Francisco, CA 94103

RE: No to the Proposed Macro Tower at 350 Amber Drive

As a resident directly affected by the proposed AT&T Wireless Macro Tower, I was horrified when first notified of the application. It is totally inappropriate for a residential neighborhood and in close proximity to a children's playground and park.

The first and most important reason to deny the applicant a permit to build is the safety hazard it presents. The potential health effects of long-term exposure to 5G's higher frequency and constant emissions are a serious concern as is the fact that RF radiation is classified as possibly carcinogenic. In addition, the proposed 10 story tower will house involves placement of electrical equipment and a 190 gallon diesel fuel tank and generator at the base of a grove of eucalyptus trees. In this extremely windy area, those trees would create a serious fire hazard should wind gusts topple one or more onto the tower.

The second reason is that the tower will obstruct views from my street as well as several others and the hideous nature of the tower will have a negative effect on neighboring property values.

Finally, you should be aware that Section 40002 of the so-called One Big Beautiful Bill recently signed by the President will allow telecoms to place an unlimited number of antennas on existing antenna structures. So, even if you think you know what you could be approving, you do not. It could be a good deal worse.

If AT&T wishes to improve cell phone service, it should look for a more appropriate site than a residential neighborhood, a site adjacent to a park and playground.

I urge you to turn down this application.

Sincerely,

Deborah J. Nosowsky

278 Amber Drive

From:	aerate5376@mypacks.net
To:	BOS Legislation, (BOS)
Subject:	Re: SUPPORT-File No. 251094 - Appeal CEQA Class 3 Exemption and File No. C251098 Conditional Authorization Use approval at 350 Amber Dr Project
Date:	Monday, December 1, 2025 12:11:23 PM
Attachments:	Cell Tower Glen Canyon to Supervisors.pdf Ian -Cell Tower Ltr to Supervisors.docx

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This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Members of the Board of Supervisors,

Please see the attached two letters regarding the proposed cell tower in Glen Canyon. Many thanks for your time and attention.

Sincerely,

Jay Wagner
Diamond Heights resident

Re: Proposed Monopole Cell Tower in Diamond Heights Nov 25TH, 2025
Dear Supervisor Mandelman

Glen Canyon is one of the most beautiful, natural areas in San Francisco. It is stunningly unique with its creek, rock formations, carpets of wildflowers, trees, and coyote den. The canyon is filled with gorgeous birds including owls that nest there every year. This behemoth, 104-foot monopole monstrosity that is proposed just on the border of the canyon will be a hideous eyesore near this otherwise pristine wildlife area and will be visible from just about everywhere. There's no escaping the presence of this beast.

The canyon boasts many walking/ hiking trails. We, and many of our friends and neighbors, hike these trails and the Diamond Heights hills every single day. The canyon attracts visitors - both locals and world travelers. We all enjoy the peace and serenity this natural escape provides us.

Christopher Park is a wonderful green space that is also right next to the proposed tower site. It hosts many gatherings for both adults and children (including a nursery school), and provides a track for running and walking and a field for baseball, Tai Chi, and exercising...another neighborhood gem that would be negatively affected by this urban blight.

Besides all of the above, property values will surely plummet not only for those in very close proximity to the monopole, but to all of us in the neighborhood. Prices drop everywhere as the whole district is affected. More urban decay.

Then there are safety issues to consider: We are all concerned about the fire danger with a huge, extremely tall, electric monopole in very windy conditions next to the extensive dry brush and grass in the canyon and surrounding area. We also live in earthquake country so toppling is a concern as well – especially during heavy rains when surrounding trees routinely fall from over-saturated soil.

Glen Canyon is truly one of San Francisco's natural treasures. Please, please find somewhere else to erect this ugliness or at least please consider scaling down. For goodness' sake, not here in this sacred urban respite. Thank you.

Sincerely, Jay Wagner, Duncan St, San Francisco, CA

November 25th, 2025

Concerning: The proposed construction of AT&T's Macro Cell Tower in Diamond Heights.

Dear Supervisor Mandelman

In 1961 the area surrounding George Christopher Park was carefully and deliberately developed to enhance everyone's enjoyment of the many native plants and animals that inhabit Glen Canyon and its surrounding area. The residents and visitors to the area, free of traffic noise and pollution, have always been appreciative of the quiet, and careful to leave the natural life surrounding the park undisturbed.

The proposed Cell Tower will threaten an end to that peace and harmony between nature and human relations within the park area and its environs. Simply by its placement and construction, damage will be laid upon the wildlife due to its range of interference.

Beyond that, it is almost inevitable that a number of old trees will be felled to ensure the 'safety' of the tower from branches and falling trees.

However our (questionable) constant thrust for more technology is accommodated, I submit this site to be a most unsuitable location for such ambition. Please reconsider.

Ian J. James

491 Goldmine St
San Francisco, CA 94131

From:	Marcia Sanchez
To:	BOS Legislation, (BOS)
Subject:	Vital Information Regarding Appeal Against AT&T"s Monopole (File#C251098)
Date:	Monday, December 1, 2025 10:08:23 AM
Attachments:	Memorandum In Opposition 2024004318CUA.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,
I am respectfully attaching a Memorandum In Opposition, a formal, written document, for your consideration regarding File #C251098. I am doing so in order to provide you with pertinent information before the appeal is formally heard by the entire Board of Supervisors on 12//09/25. It was submitted on behalf of 72 members of the community for the Planning Commission's Public Hearing on 9/25/25 in opposition to AT&T's application for a CUA to install a 104-foot monopole cell tower at 350 Amber Dr.
I ask that you please read the document because it appears as though four of the seven commissioners ignored it. Its contents are vital, and it demonstrates how AT&T's proposal violates the General Plan, citing guidelines, and Open Space priorities.
Thank you for your attention to this matter.
Sincerely,
Marcia Sanchez
950 Duncan Street
Unit 101E
San Francisco, CA 94131
415-655-9174
12/01/25

CITY AND COUNTY OF SAN FRANCISCO
STATE OF CALIFORNIA

----------X

In the Matter of the Application of:

AT&T

For Conditional Use Authorization

Case No.: 2024-004318

Premises: 350 Amber Drive
San Francisco, CA 94131

Block/Lot: 7521/005

----------X

MEMORANDUM IN OPPOSITION

Respectfully submitted,

Marcia Sanchez
950 Duncan St.
#101 E
San Francisco, CA 94131

Charlie Mader
135 Red Rock Way
#308 L
San Francisco, CA 94131

Fred Randolph
950 Duncan St.
#101 E
San Francisco, CA 94131

Deborah A. Lyle
970 Duncan Street
#303 F
San Francisco, CA 94131

David Lasker
5092 B Diamond Heights Bvld.
San Francisco, CA 94131

Jay Wagner
837 Duncan Street
San Francisco, CA 94131

Holly Newmark
970 Duncan St.
#206 F
San Francisco, CA 94131

Terence Groeper
970 Duncan Street
#307F
San Francisco, CA 94131

Lawrence Nelson
950 Duncan St.
#301 E
San Francisco, CA

Margaret Hoppe
1604 Diamond Street
San Francisco, CA 94131

Betsy Eddy
14 Farnum Street
San Francisco, CA 94131

Simon Rowe
970 Duncan Street
305F
San Francisco, CA 94131

Kylie Rowe
970 Duncan Street
305F
San Francisco, CA 94131

Mary Foley
963 Duncan Street
San Francisco, CA 94131

Catherine Dodd, PhD, RN
963 Duncan Ave.
San Francisco, CA 94131

Francis Cummings III
970 Duncan Street
306 F
San Francisco, CA 94131

Francis B. Oliveira
970 Duncan Street
306 F
San Francisco, CA 94131

Daniel Schereck
5610 Diamond Heights Blvd.
Apt C 12
San Francisco, CA 94131

Theresa Burchell
970 Duncan Street
#201
San Francisco, CA 94131

Jan Sheffner
970 Duncan Street
#108 F
San Francisco, CA 94131

Tim Wolfred
975 Duncan Street
San Francisco, CA 94131

Jamie Roberts
225 Amber Drive
San Francisco, CA 94131

Jacqueline Roberts
225 Amber Drive
San Francisco, CA 94131

Geoff August
190 Amber Drive
Suite 1400
San Francisco, CA 94131

Linda English
961 Duncan Street
San Francisco, CA 94131

David S. Dai
272 Amber Dr.
San Francisco, CA 94131

Ronald Bander
85 Ora Way
San Francisco, CA 94131

Edward Kamrin
255 Red Rock Way
301 H
San Francisco, CA 94131

Robert Ott
970 Duncan Street
#205 F
San Francisco, CA 94131

Arthur Bodner
816 1/2 Alvarado Street
San Francisco, CA 94114

Mark Miles
940 Duncan Street

#205 D
San Francisco, CA 94131

Karen Merigo
275 Grand View Avenue
San Francisco, CA 94114

Jessica Lew
949 Duncan Street
San Francisco, CA 94131

Herbert Lew
951 Duncan Street
San Francisco, CA 94131

Erica Po Lew
951 Duncan Street
San Francisco, CA 94131

Selena Lew
951 Duncan Street
San Francisco, CA 94131

Jackie Shan
949 Duncan Street
San Francisco, CA 94131

Terry Connor
814 Duncan Street
San Francisco, CA 94131

Jocelyn Cohen
Poetree Landscapes & Arboriculture
132 Winfield Street
San Francisco, CA 94110

Martin H Tannenbaum
215 Amber Drive
San Francisco, CA 94131

John Alexander Ingersoll
215 Amber Drive
San Francisco, CA 94131

Chanda Williams
130 Amber Drive
San Francisco, CA 94131

Garrett Hayashida
950 Duncan Street
#205 E
San Francisco, CA 94131

Janet Kessler
636 Douglass Street
San Francisco, CA 94111

Evelyn Rose
Founder, Glen Park Neighborhoods History Project
31 Mizpah Street
San Francisco, CA 94131

Tony Toy
275 Grand Avenue
San Francisco, CA 94114

Ben Reece
184 Amber Drive
San Francisco, CA 94131

Tod Elkins
25 Crags Court
San Francisco, CA 94131

Stephanie Pappas
5235 Diamond Heights Blvd.
#204
San Francisco, CA 94131

Rheanna Bates
255 Red Rock Way
San Francisco, CA 94131

Andreina Martin
60 Ora Way
San Francisco, CA 94131

Paula Lynch
136 Moffitt Street
San Francisco, CA 94131

Eleanor Ng
303 Amber Drive
San Francisco, CA 94131

Andrea Kemp
25 Jade Place
San Francisco, CA 94131

Elizabeth Mooney
731 Congo Street
San Francisco, CA 94131

Andrew Tully
731 Congo Street
San Francisco, CA 94131

Sally King
1245 Noe Street
San Francisco, CA 94114

Kelly Lang
4475 24th Street
San Francisco, CA 94114

Debbie Taylor
60 Ora Way
San Francisco, CA 94131

Jeff Loftin
950 Duncan Street
#104 E
San Francisco, CA 94131

Donna Sharee
459 Naples Street
San Francisco, CA 94112

Chrisanne Bradley
25 Crags Court
San Francisco, CA 94131

Ian J. James
491 Goldmine St.
San Francisco, CA 94131

Lisa Kellman
474 Day Street
San Francisco, CA 94131

Dino Lucas
474 Day Street
San Francisco, CA 94131

Coragene Savio
184 Gold Mine Drive
San Francisco, CA 94131

Beverley Chan Baptista
32 Vallejo Drive
Milbrae, CA 94030

Carolyn C. Helser
1001 Van Ness Avenue
#1201
San Francisco, CA 94109

John Wilk, PhD
14 Farnum Street
San Francisco, CA 94131

Diane Kefauver
1726 Great Highway
San Francisco, CA 94122-3923

Vladimir Kostiukov
261 Amber Drive
San Francisco, CA 94131

Sha Soul
940 Duncan Street
#102D
San Francisco, CA 94131

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Preliminary Statement

This memorandum is submitted in opposition to the application of AT&T for Conditional Use Authorization to erect a 104-foot (10+ stories) monopine cell tower at 350 Amber Drive, San Francisco. It is submitted on behalf of multiple homeowners whose homes are situated adjacent to or in close proximity to the site for the proposed cell tower.

This project will include 12 new antennas, 9 remote radio units, and the equipment required to run this behemoth. The tower would literally "tower" over nearby homes (at most four stories) and trees the tallest of which are 80-90 feet tall. The only "camouflage" will be paint. Nothing will hide this eyesore. It will loom over the nearby homes, sticking out "like a sore thumb," and will forever change the unique character of the community. The proposed tower will *not* be compatible or harmonious with the community resulting in a severe negative aesthetic impact, together with a substantial decrease in property values.

As set forth below, AT&T's application should be denied because:

(a) AT&T has failed to establish that granting the application would be consistent with applicable provisions of the San Francisco General Plan, San Francisco Planning Code, San Francisco Public Works Code, and federal law including the Telecommunications Act.

(b) granting the application would violate not only these applicable provisions, but the legislative intent upon which they are based;

(c) the applicant has failed to establish that the proposed facility:
(i) is actually necessary for the provision of personal wireless services within the area, or
(ii) that it is necessary that the facility be built at the proposed site;

(d) the irresponsible placement of the proposed facility would inflict upon the nearby homes and community the precise types of adverse impacts which the applicable provisions of the Planning Code and Public Works Code were enacted to prevent.

It is respectfully submitted that AT&T's application should be denied, and that the denial be written in compliance with the Telecommunications Act of 1996.

POINT I

Granting AT&T's Application for Its Proposed Wireless Telecommunication Facility Would Violate Applicable Laws and the Legislative Intent Upon Which They Were Enacted

As set forth below, AT&T's application should be denied because granting the application would violate the requirements of the City's Planning Code, the Telecommunications Facilities provisions and the City's General Plan.

A. Local Municipalities Are Authorized by the TCA to Regulate Telecommunications Facilities

The proliferation of wireless communications facilities has resulted in the need for municipalities to pass legislation to regulate their construction. Although many site developers and cellular service providers will argue that the Telecommunications Act of 1996 (TCA) prohibits local governments from regulating telecommunications facilities, this is simply untrue. The TCA, 47 U.S.C. §332(c)(7) specifically *preserves local zoning authority*. Subsection (A) provides for general authority as follows:

> (7) Preservation of local zoning authority
>
> (A) General authority
> Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification

of personal wireless service facilities.

While subsection (B) forbids a municipality from "unreasonably discriminat[ing] among providers" and from completely "prohibiting the provision of personal wireless services" the fact remains that a municipality may restrict the placement, location, construction, and modification of wireless facilities in their community through zoning regulations. *See, T-Mobile South, LLC v. Roswell,* 135 S.Ct. 808 (2015); *GTE Mobilnet of California Ltd. P'ship v City of Berkley*, 2023 WL 2648197 (D. N.D. CA 2023); *Colfaxnet LLC v City of Colfax,* 2020 WL 6544494 (D. E.D. CA 2020).

"The TCA seeks to strike a balance between its goal of 'encourage[ing] the rapid deployment of new telecommunications technologies' without unduly encroaching on traditional local zoning authority." *New Cingular Wireless PCS LLC d/b/a AT&T Mobility v. Zoning Board of Adjustment of the Borough of North Haledon,* 469 F.Supp.3d 262 (D. N.J. 2020) *citing, T Mobile Ne. LLC v. City of Wilmington, Del.,* 913 F.3d 311 (3d Cir. 2019). "To this end, it 'expressly preserves the traditional authority enjoyed by state and local government to regulate land use ...." *Id., citing, APT Pittsburgh Ltd. P'ship v. Penn Twp. Butler Cty. of Pa.,* 196 F.3d 469 (3d Cir. 1999); *Extenet Systems, Inc. v. Township of North Bergen, New Jersey,* 2022 WL 1591398 (D.N.J. 2022).

Simply stated, the TCA provides that an application to erect a cell tower can – and should – be treated as a land use issue, to be decided by a municipality in its ordinary course of business, using the same considerations normally employed in a land use case.

Consistent with the intent of this federal law, informed local governments have enacted "Smart Planning Provisions," which are local land use regulations designed to:

(a) prevent an *unnecessary proliferation* of wireless facilities while

(b) preventing, to the greatest extent possible, unnecessary adverse impacts upon residential homes and communities due to the irresponsible placement of wireless facilities.

As set forth below, AT&T's application should be denied because granting the application violates not only the *requirements* of the applicable City laws and regulations, but their *legislative intent.*

B. Applicable Local Law

Generally, the overarching principle of legislation is for the benefit and protection of the municipality's citizens. This protection includes preservation of the citizens' property rights and property value, as well as protection of the character of the community and quality of life.

(i) San Francisco Planning Code and General Plan

The City's Planning Code " is adopted to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare, and for the following more particularly specified purposes: (a) To guide, control and regulate future growth and development in accordance with the General Plan of the City and County of San Francisco. . . ." (§101).

In addition, the Code is intended to:

(b) To protect the character and stability of residential, commercial and industrial areas within the City, and to promote the orderly and beneficial development of such areas;

(c) To provide adequate light, air, privacy and convenience of access to property, and to secure safety from fire and other dangers;
(*Id.*)

Construction of a wireless telecommunications facility is further regulated by Section 303

(Conditional Uses) and Article 25 (Personal Wireless Service Facilities) of the Code.

Pursuant to §303 of Article 3, a conditional use may be permitted *only* if the facts presented are such to establish that:

(1) The proposed use or feature, at the size and intensity contemplated and at the proposed location, will provide a development that is necessary or desirable for, and compatible with, the neighborhood or the community.

(2) Such use or feature as proposed will not be detrimental to the health, safety, convenience or general welfare of persons residing or working in the vicinity, or injurious to property, improvements or potential development in the vicinity

(3) Such use or feature as proposed will comply with the applicable provisions of this Code and will not adversely affect the General Plan; and

(4) Such use or feature as proposed will provide development that is in conformity with the stated purpose of the applicable Use District

A Conditional Use Permit should not be granted for AT&T's proposed project at 350 Amber Drive because the application fails to satisfy the necessary findings required under §303 of Article 3 of the Planning Code. First, the proposed telecommunications facility is neither necessary nor desirable at the proposed size and intensity, nor is it compatible with the character of the neighborhood. Installing a large, industrial-style wireless facility in this setting would represent a stark and intrusive departure from the existing neighborhood fabric. The project offers no compelling evidence that this specific location is the only viable option for the proposed tower, and its presence would be a visual and environmental imposition on the community.

Additionally, the proposed project does not fully comply with the Planning Code nor does it align with the General Plan. The General Plan places high value on preserving neighborhood character, visual aesthetics, and environmental quality—values that this project undermines. The industrial appearance and infrastructure required for the AT&T facility clash with the neighborhood's design guidelines and threaten the visual cohesion of the community. Moreover, the proposal does not sufficiently address alternatives or mitigation strategies that would reduce its impact.

The San Francisco General Plan is the foundation of the Planning Code and also emphasizes the quality and environmental balance echoed in the Planning Code. The General Plan begins with a Purpose and Process and Vision. A common thread throughout the Plan is an emphasis on quality of life. In fact, the first few sentences of the Purpose of the Plan state that "The San Francisco General Plan is the embodiment of the City's vision for the future, serving to guide evolution and growth over time. It provides a comprehensive set of goals, objectives and policies that influence how people live, work, and move about, as well as the quality and spirit of the City."

The Vision begins "The General Plan's goals, objectives and policies have been developed with extensive community engagement. These robust conversations and public hearings are designed to distill a shared vision for the City's future. In this shared vision, San Francisco strives to be...

> *a safe, livable and environmentally sustainable city, where all are able to live healthy lives and access thriving natural systems, restorative parks, and a high-quality built environment. The climate crisis requires urgent local, regional, and global action.*

The construction of a 104-foot cell tower at 350 Amber Drive is not compatible with the San Francisco General Plan, which emphasizes environmental balance, neighborhood character, and quality of life. Rather than contributing to a harmonious and livable urban fabric, the proposed tower would introduce visual blight, disrupt neighborhood aesthetics, and undermine the peaceful character that the General Plan seeks to protect. The project does not align with the goals of sustainability, health, or aesthetic quality, and would create long-term impacts on residents' enjoyment of their surroundings, including views, open space, and well-being. For these reasons, the proposed project fails to uphold the core values and intentions of the San Francisco General Plan.

(ii) Wireless Telecommunications Services Facilities Siting Guidelines

Furthermore, the Planning Department of the City and County of San Francisco proffered a Wireless Telecommunications Services Facilities Siting Guidelines. These guidelines were enacted to quell resident's concerns about health, safety and visual impacts. "The increase in the number of applications and the areas potentially affected by these uses, plus the legitimate concerns raised by the residents and the Department, compelled the Department to reexamine its informal procedures in light of applicable Planning Code provisions and to consequently require a Conditional Use Authorization for many of the applications."

The Facilities Siting Guidelines, were specifically developed to address a range of resident concerns including the visual and aesthetic impacts of wireless infrastructure. Among the primary concerns were the proliferation of antennae and backup equipment, particularly on buildings where such equipment is visible from the street or obstructs views from nearby residential units. Residents also expressed worry about visual clutter, especially in

neighborhoods with high demand for wireless services, where multiple carriers might each seek to install numerous antennas to boost capacity, leading to an overwhelming and unsightly accumulation of equipment.

The Guidelines also provide for following:

- "Insure that the type of WTS facility is compatible with the scale of the locale or, if it is out of scale, is (1) determined to be necessary at that location for the Applicant's operational needs; (2) meets the criteria of Section 303(c) of the Planning Code; and (3) incorporates all feasible measures to ameliorate visual intrusion or other adverse impacts. Whenever feasible, design out-of-scale facilities as public art rather than obtrusive utilities." *Section 7. LU2*
- "Protect the urban design, scale, architectural character and visual continuity of the neighborhood by siting WTS facilities on buildings and in such a way that would minimize visual obtrusion and protect the vistas and beauty of San Francisco." *Section 7, UD1*
- "WTS facilities owned and operated by a private carrier on a public property which lies within a P-Public District are permitted only as a conditional use pursuant to Section 234.2(a) of the Planning Code."
- "A privately-operated WTS installation on City-owned property would represent a change of use and would also require a finding of consistency with the General Plan"
- "Any change of use on a public property or a public right-of-way, whether zoned a P District or not, requires a finding of consistency with the City's General Plan by the

Planning Commission or, through administrative review, by the Director of Planning or Zoning Administrator (General Plan Referral process)"

The proposed 104-foot cell tower at 350 Amber Drive does not comply with the San Francisco General Plan nor does it meet the requirements for approval as a conditional use, and therefore should not be granted a permit. Due to the facility's significant adverse visual impacts, incompatibility with the surrounding residential character, and failure to protect scenic views and neighborhood aesthetics, the project cannot reasonably be found to align with the goals and policies of the General Plan. Furthermore, under the General Plan Referral process, any change of use on public property—whether or not it lies within a P District—requires a consistency determination by the Planning Commission or Director of Planning. Based on the visual, environmental, and community impacts associated with this proposal, such a finding cannot be justified, and the conditional use permit should be denied.

POINT II

The Proposed Tower Will Have a Severe Detrimental Impact on the Aesthetics and Character of the Area, As Well As Cause a Significant Decrease in Property Value

A. AT&T's Irresponsible Placement of Its Proposed Wireless Facility Will Inflict Substantial Adverse Impacts Upon the Aesthetics and Character of the Area

The proposed wireless facility will inflict dramatic and wholly unnecessary adverse impacts upon the area's aesthetics and character. As noted above, the applicable provisions of the Codes not only recognize the importance of the visual "feel" of a neighborhood, they codify

its significance, requiring wireless facilities to be compatible with the community. In this instance, AT&T's proposed tower at 350 Amber Drive will have a clear negative impact on the surrounding area. Despite the weak attempt to camouflage the tower behind trees, it will be easily recognizable and readily visible all over the neighborhood, creating an extremely displeasing aesthetic.

Moreover, AT&T hasn't presented any relevant data demonstrating that the proposed facility is even necessary, let alone that the proposed location is the best possible location to remedy any purported significant gap in coverage AT&T claims exists.

Federal courts around the country, including the United States Court of Appeals for the Ninth Circuit, have held that significant or unnecessary adverse aesthetic impacts are proper legal grounds upon which a local government may deny a zoning application seeking approval for the construction of a wireless telecommunication facility. For example, the United States Court of Appeals for the Ninth Circuit determined that there is nothing to "prohibit local governments from taking into account aesthetic considerations in deciding whether to permit the development of wireless telecommunications facilities (WCFs) within their jurisdictions." *Sprint PCS Assets, L.L.C. v. City of Palos Verdes Ests.*, 583 F.3d 716 (9th Cir. 2009), *see also GTE Mobilnet of Calif. Ltd. P'ship v. City of Berkley,* supra ("Even under a substantial evidence review, zoning decisions based on aesthetic concerns can be valid," and "under the TCA, [a zoning board] is entitled to make an aesthetic judgment as long as the judgment is 'grounded in the specifics of the case,' and does not evince merely an aesthetic opposition to cell-phone towers in general." *citations omitted); and New Cingular Wireless PCS, LLC v. County of Marin,*

Calif., 2021 WL 5407509, (N.D. Calif. 2021).

"[T]he City may consider a number of factors including the height of the proposed tower, the proximity of the tower to residential structures, the nature of uses on adjacent and nearby properties, the surrounding topography, and the surrounding tree coverage and foliage. We, and other courts, have held that these are legitimate concerns for a locality." *T-Mobile USA, Inc. v. City of Anacortes*, 572 F.3d 987, 994 (9th Cir. 2009). *See also, Sprint Telephony PCS, L.P. v. Cty. of San Diego*, 543 F.3d 571, 580 (9th Cir. 2008) (stating that the zoning board may consider "other valid public goals such as safety and aesthetics"); *T-Mobile Cent., LLC v. Unified Gov't of Wyandotte County, Kan.*, 546 F.3d 1299, 1312 (10th Cir.2008) (noting that "aesthetics can be a valid ground for local zoning decisions"); and *Cellular Tel. Co. v. Town of Oyster Bay,* 166 F.3d 490, 494 (2d Cir.1999) (recognizing that "aesthetic concerns can be a valid basis for zoning decisions").

Additionally, as is set forth below, AT&T has failed to provide a shred of *probative evidence* to establish that the wireless communications facility is not injurious to the neighborhood and is *actually necessary* to provide personal wireless coverage in the area.

B. Evidence of the Actual Adverse Aesthetic Impacts Which the Proposed Facility Would Inflict Upon the Nearby Homes

As logic would dictate, the people who are best suited to assess the nature and extent of the adverse aesthetic impacts, which an irresponsibly placed wireless telecommunication facility would inflict upon homes in close proximity to the proposed facility, are the homeowners themselves.

Consistent with this logic, the United States Court of Appeals for the Second Circuit has

recognized that when a local government is considering a wireless facility application, it should accept, as direct evidence of the adverse aesthetic impacts that a proposed facility would inflict upon nearby homes, statements and letters from the actual homeowners, since they are in the best position to know and understand the actual extent of the impact they stand to suffer. *See, e.g., Omnipoint Communications Inc. v. The City of White Plains*, 430 F.3d 529 (2d Cir. 2005).

Annexed collectively hereto as **Exhibit "A"** are letters from homeowners whose homes are situated adjacent to, or in close proximity to the site upon which AT&T seeks to install its proposed wireless telecommunications facility.

Each of these letters contains specific, personal details from the homeowners regarding the adverse aesthetic impacts that the proposed facility would inflict upon their homes. They have provided detailed and compelling descriptions of the dramatic adverse impacts their properties would suffer if the proposed installation of a wireless telecommunication facility were permitted to proceed. They describe the reasons the homeowners came to San Francisco, including the beautiful scenery, the natural setting, the views from their windows and backyards, and the unique character of their community.

Many of these homeowners have also expressed their concerns about the decrease in property value their homes will suffer as a result of the proposed wireless facility. Having made a substantial investment in their homes, having labored to maintain and beautify their homes, they are concerned about the decrease in the value of their properties.

These letters convey all the ways the proposed tower will negatively affect the nearby residents, their views, their enjoyment of their homes and the loss of property values.

Significantly, as is set forth above, all of the adverse aesthetic impacts the proposed wireless facilities would inflict upon these homes are entirely unnecessary because AT&T has not demonstrated a significant gap which needs to be filled within the City.

The specific and detailed impacts described by the adjacent and nearby property owners constitute "*substantial evidence*" of the adverse aesthetic impacts they stand to suffer because they are not limited to "generalized concerns." These letters contain specific, detailed descriptions of how the proposed facility would dominate the views from their bedroom windows, living rooms, kitchens, front yards and backyards. *See GTE Mobilnet, supra; Voice Stream PCS I, LLC v. City of Hillsboro, 301 F.Supp. 2d 1251 (D. Or. 2004).*

The severe adverse aesthetic impacts which would be caused by the proposed wireless facility's irresponsible placement which are detailed in these letters, are the precise type of damaging impacts that the Planning Code and Wireless Facilities Siting Guidelines were specifically enacted to prevent. Accordingly, AT&T's application should be denied.

C. AT&T's Visual Assessment is Inherently Defective and Should Be Disregarded Entirely

In a hollow effort to induce the City to believe that the installation of the proposed wireless facility would not inflict a severe adverse aesthetic impact upon the adjacent homes, AT&T has submitted what purports to be photo simulations of what the neighborhood would look like if the tower were to be built. However, these photo simulations are faulty and ultimately meaningless.

As is undoubtedly known to AT&T, the visual impact analysis presented is inherently defective because it does not serve the purpose for which it has been offered. The reason local

governments require photo simulations, or other visual impact studies, of a proposed wireless facility is to require applicants to provide the reviewing authority with a clear visual image of the *actual* aesthetic impacts that a proposed installation will inflict upon the nearby homes and community.

Not surprisingly, applicants often disingenuously seek to minimize the visual impact of these depictions by ***deliberately omitting*** from their photo simulations any images *actually taken from* the nearby homes that would sustain the most severe adverse aesthetic impacts.

In a widely cited case, *Omnipoint Communications Inc. v. The City of White Plains,* 430 F3d 529 (2nd Cir. 2005), the United States Court of Appeals for the Second Circuit explicitly ruled that where a proponent of a wireless facility presents visual impact depictions where they "omit" any images from the perspectives of the homes which are in closest proximity to the proposed installation, such presentations are inherently defective, and should be disregarded.

As was explicitly stated by the federal court: "the Board was free to discount Omnipoint's study because it was conducted in a defective manner. . . ***the observation points were limited to locations accessible to the public roads, and no observations were made from the residents' backyards much less from their second story windows***" *Id.*

A simple review of the records shows that AT&T has failed to submit a meaningful visual impact analysis. AT&T has not included a single image taken from the vantage point of *any* of the nearby homes that will sustain the most severe adverse aesthetic impacts from the installation of the wireless facility which AT&T seeks to construct in such close proximity to those homes. This, of course, includes a complete absence of any photographic images taken

from any of the homes belonging to the homeowners whose adverse aesthetic impact letters are annexed hereto as **Exhibit "A."**

Instead, the photo simulations only consist of photos taken from public roads, and from angles and perspectives designed to minimize the appearance of the adverse aesthetic impact. They in no way accurately depict the view the affected homeowners will see, each and every time they look out their bedroom, kitchen, or living room window, or sit in their backyard. This is the exact type of "presentation" which the federal court explicitly ruled to be defective in *Omnipoint*. As such, in accord with the federal court's holding in *Omnipoint*, AT&T's visual impact analysis should be recognized as inherently defective and disregarded in its entirety.

D. The Proposed Installation Will Inflict Substantial and Wholly Unnecessary Losses in the Values of Adjacent and Nearby Residential Properties

In addition to the adverse impacts upon the aesthetics and residential character of the neighborhood at issue, such an irresponsibly placed wireless facility would inflict upon nearby homes a severe adverse impact on the property values of those residences.

As established by the evidence submitted herein, if AT&T is permitted to install the proposed wireless facility in such close proximity to nearby homes, it would inflict upon those homes dramatic losses in property value, to the extent that the homeowners would suffer significant losses in the values of their residential properties.

It is a common misconception that a municipality, like San Francisco, may not consider property values when making its determination on wireless telecommunications facility applications. This is not true and is contrary to established precedent in the federal courts. *See*

Omnipoint, supra. In addition, it would directly contradict the purpose and intent of the City's Planning Code, including the Telecommunication Facilities provisions which surely contemplate preventing material detriment to property value.

Across the entire United States, both real estate appraisers[1] and real estate brokers have rendered professional opinions that simply support what common sense dictates. When wireless facilities are installed unnecessarily close to residential homes, such homes suffer material losses in value, typically ranging from 15% to 20%, but up to 30% in some cases.[2] In the worst cases, facilities built near existing homes have caused the homes to be rendered wholly unsaleable.[3]

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[1] *See e.g.* a February 22, 2012 article discussing a NJ appraiser's analysis wherein he concluded that the installation of a Wireless Facility in close proximity to a home had reduced the value of the home by more than 10%, go to http://bridgewater.patch.com/articles/appraiser-t-mobile-cell-tower-will-affect-property-values

[2] In a series of three professional studies conducted between 1984 and 2004, one set of experts determined that the installation of a Wireless Facility in close proximity to a residential home reduced the value of the home by anywhere from 1% to 20%. These studies were as follows:

The Bond and Hue - *Proximate Impact Study* - The Bond and Hue study conducted in 2004 involved the analysis of 9,514 residential home sales in 10 suburbs. The study reflected that close proximity to a Wireless Facility reduced price by 15% on average.

The Bond and Wang - *Transaction Based Market Study*

The Bond and Wang study involved the analysis of 4,283 residential home sales in 4 suburbs between 1984 and 2002. The study reflected that close proximity to a Wireless Facility reduced the price between 20.7% and 21%.

The Bond and Beamish - *Opinion Survey Study*

The Bond and Beamish study involved surveying whether people who lived within 100' of a Wireless Facility would have to reduce the sales price of their home. 38% said they would reduce the price by more than 20%, 38% said they would reduce the price by only 1%-9%, and 24% said they would reduce their sale price by 10%-19%.

[3] Under FHA regulations, no FHA (federally guaranteed) loan can be approved for the purchase of any home which is situated within the fall zone of a Wireless Facility. *See* HUD FHA HOC Reference Guide Chapter 1 - hazards and nuisances. As a result, there are cases across the country within which: (a) a homeowner purchased a home, (b) a Wireless Facility was thereafter built in close proximity to it, and (c) as a result of same, the homeowners could not sell their home, because any buyer who sought to buy it could not obtain an FHA guaranteed loan. *See, e.g.,* October 2, 2012 Article ". . .Cell Tower is Real Estate Roadblock" at http://www.wfaa.com/news/consumer/Ellis-County-Couple--Cell-tower-making-it-impossible-to-sell-home--172366931.html.

Federal courts recognize that it is perfectly proper for a local zoning authority to consider as direct evidence of the reduction in property values that an irresponsibly placed wireless facility would inflict upon nearby homes, the professional opinions of licensed real estate brokers (as opposed to appraisers) who provide their professional opinions as to the adverse impact upon property values that would be caused by the installation of the proposed wireless facility. *See Omnipoint supra.* This is especially true when they possess years of real estate sales experience within the community and the specific geographic area at issue.

As evidence of the adverse impact that the proposed facility would have upon the property values of the homes that would be adjacent or in close proximity to it, annexed hereto as **Exhibit "B"** are letters setting forth the professional opinions of licensed real estate professionals, who are familiar with the specific real estate market at issue, and who submit their professional opinions regarding specific residences, that the installation of the proposed facility would cause property values of the affected homes to be reduced by up to 20% - 30% and would make those homes more difficult to sell, even at reduced purchase prices.

This devaluation of properties is one of the very things the local laws specifically seek to prevent. As noted above, a use permit may only be granted if all of the conditions listed in §303(c) are met, including not being materially injurious to properties or improvements in the vicinity. Given the significant reductions in property values that the proposed installation would inflict upon the nearby homes, AT&T's application should be denied.

POINT III

§ 6409(a) of the Middle-Class Tax Relief and Job Creation Act of 2012 Would Allow AT&T to Increase the Height of the Proposed Facility Without Further Zoning Approval

As severe as the adverse impacts upon the nearby homes and community would be if the 104-foot facility were constructed as proposed by AT&T, if such a facility were to be built, AT&T could unilaterally choose to increase the height of the facility by as much as twenty (20) feet. The City would be legally prohibited from stopping them from doing so due to the constraints of the Middle-Class Tax Relief and Job Creation Act of 2012.

§6409(a) of the Middle-Class Tax Relief and Job Creation Act of 2012 provides that notwithstanding Section 704 of the Telecommunications Act of 1996 or any other provision of law, a State or local government *may not deny, and shall approve*, any eligible request for a modification of an existing wireless facility or base station that does not substantially change the physical dimensions of such facility or base station. *See* 47 U.S.C. §1455(a).

Under the FCC's reading and interpretation of §6409(a) of the Act, local governments are prohibited from denying modifications to wireless facilities unless the modifications will "substantially change" the physical dimensions of the facility, pole, or tower.

The FCC defines "substantial change" to include any modification that would increase the height of the facility by more than ten (10%) percent or by more than "the height of one additional antenna with separation from the nearest existing antenna not to exceed 20 feet, *whichever is greater*." (Emphasis added.) This height increase could not be challenged or prevented by the City.

Simply stated, under the FCC's regulation, if this facility were to be built, AT&T, at any time thereafter, could unilaterally increase the height of any such facility by as much as an additional twenty (20) feet, and there would be no way for the City to prevent such an occurrence, regardless of how many zoning regulations it would violate.

Considering the even more extreme adverse impacts which an increase in the height of the facility would inflict upon the homes and community nearby, AT&T's application should be denied, especially since, as set forth below, AT&T doesn't actually *need* the proposed facility.

POINT IV

AT&T Has Failed to Proffer Probative Evidence Sufficient to Establish a Need for the Proposed Wireless Facility at the Location Proposed, or That the Granting of Its Application Would Be Consistent With the Smart Planning Requirements of the City's Planning Code

The intent behind the provisions of the City's Planning Code, including the provisions regulating wireless telecommunications facilities, is to promote "smart planning" of wireless infrastructure within the City.

Smart planning involves the adoption and enforcement of zoning provisions that require wireless telecommunication facilities be *strategically placed* so that they minimize the number of facilities needed while saturating the City with complete wireless coverage (*i.e.*, they leave no gaps in wireless service) and avoiding any unnecessary adverse aesthetic or other impacts upon homes and communities situated in close proximity to such facilities.

To determine if a proposed wireless telecommunications facility would be consistent with smart planning requirements, sophisticated planning boards require wireless carriers

and/or site developers to provide direct evidentiary proof of:

(a) the *precise locations, size, and extent of any geographic gaps in personal wireless services* that are being provided by a specifically identified wireless carrier, which provides personal wireless services within the respective jurisdiction, ***and***

(b) the *precise locations, size, and extent of any geographic areas* within which that identified wireless carrier suffers from a capacity deficiency in its coverage.

The reason that local zoning boards invariably require such information is that without it, the boards are incapable of knowing:

(a) if, and to what extent a proposed facility will remedy any actual gaps or deficiencies which may exist, and

(b) if the proposed placement is in such a poor location that it would all but require that more facilities be built because the proposed facility did not actually cover the gaps in service which actually existed, thereby causing an unnecessary redundancy in wireless facilities within the City.

In the present case, AT&T has wholly failed to provide any hard data to establish that the proposed placement of its facility would, in any way, be consistent with the smart planning provisions. Thus, it has failed to provide actual probative evidence to establish:

(a) the *actual location of* gaps (or deficient capacity locations) in personal wireless services within the City, and

(b) why or how their proposed facility would be the best and/or least intrusive means of remedying those gaps.

Moreover, as will be further discussed below, AT&T failed to present any hard data and has

failed to present any useful data at all.

A. The Applicable Evidentiary Standard

Within the context of zoning applications such as the current one filed by AT&T, an applicant is required to prove that there are ***significant*** gaps[4] in its wireless service, that the location of the proposed facility will remedy those gaps, and that the facility is the least intrusive means of remedying that gap.

The Ninth Circuit has set forth the following requirements, which all applicants seeking to install wireless facilities must prove. The test articulated by the Ninth Circuit requires AT&T to demonstrate that:

(1) the proposed facility is required in order to close a significant gap in service coverage;
(2) that the proposed facility is the least intrusive means of remedying the significant gap in service coverage, and
(3) a meaningful inquiry has been made as to why the proposed facility is the only feasible alternative.

See Am. Tower Corp. v. City of San Diego, 763 F.3d 1035 (9th Cir. 2014); *GTE Mobilnet, supra*; *T-Mobile USA, Inc. v. City of Anacortes*, *supra* 572 F.3d 987 (9th Cir. 2009).

"The TCA does not assure every wireless carrier a right to seamless coverage in every area it serves, and the relevant service gap must be truly 'significant' and 'not merely individual 'dead spots' within a greater service area." *Los Angeles SMSA Limited Partnership v. City of*

[4] It should be noted that establishing a gap in wireless services is *not* enough to prove the need for a wireless facility; rather, the applicant must prove that "a significant gap" in wireless service coverage exists at the proposed location. *See, e.g., Omnipoint Holdings, Inc. v. City of Cranston*, 586 F.3d 38, 50 (1st Cir. 2009); *MetroPCS, Inc. v. City and County of San Francisco*, 400 F.3d 715, 731 (9th Cir.2005). Here, Vertical Bridge failed to proffer substantial evidence that a gap in wireless services exists—let alone that this purported gap is "significant" within the meaning of the TCA and established federal jurisprudence.

Los Angeles 2021 WL 4706999 (C.D. Calif. 2021) *quoting MetroPCS, Inc. v. City and County of San Francisco,* 400 F.3d 715 (9th Cir. 2005).

With respect to a "gap in service," "where the holes in coverage are very limited in number or size... the lack of coverage likely will be *de minimis* so that denying applications to construct towers necessary to fill these holes will not amount to a prohibition of service." *Sprint Spectrum L.P. v. Willoth*, 176 F.3d 630 (2d Cir. 1999): *T-Mobile v Town of Islip, supra.*

Further, the *T-Mobile* Court, *citing Willoth,* held that "the fact that T-Mobile may have a need for the Proposed Facility does not 'trump all other important considerations, including the preservation of the autonomy of states and municipalities.'"

More specifically, the United States Court of Appeals for the Ninth Circuit stated in *Am. Tower Corp. v. City of San Diego*, *supra,* "[w]hen determining whether a locality has effectively prevented a wireless services provider from closing a significant gap in service coverage, as would violate the federal Telecommunications Act (TCA), some inquiry is required regarding the feasibility of alternative facilities or site locations, and a least intrusive means standard is applied, which requires that the provider show that the manner in which it proposes to fill the significant gap in services is the least intrusive on the values that the denial sought to serve." *Id. See also Anacortes*, *supra.* That is, is the proposed tower the least intrusive means in light of the municipality's zoning regulations and the legislative intent behind them?

There doesn't even appear to be any good faith effort by AT&T to place the facility in a location where the adverse aesthetic impact on the community is minimal.

Furthermore, there is no satisfactory explanation why the nearly dozen other towers in the

area are not feasible for colocation or not providing adequate coverage. ***See Exhibit "C."*** Further, it appears that only existing AT&T sites were considered. Was collocation on another carrier's tower investigated? Were small cell facilities considered instead of the huge monopine? Were micro cells or cellular arrays mounted on buildings considered? What, exactly, is the extent of AT&T's analysis of alternative sites?

An applicant is required to perform their due diligence and conduct a good faith, meaningful investigation into alternative sites. *Up State Tower Co. v Town of Southport, NY* 412 F.Supp.3d 270 (W.D.N.Y. 2019). Interestingly, the *Omnipoint* Court found that where "other cell companies serve the area...the Board could infer that other towers erected by other companies are in the vicinity, and that Omnipoint had the burden of showing either that those towers lacked capacity for an Omnipoint facility or that (for some other reason) those towers were unavailable to bridge Omnipoint's coverage gap."

Moreover, a local government may reject an application for construction of a wireless service facility in an under-served area without thereby prohibiting wireless services if the service gap can be closed by less intrusive means. *Sprint Spectrum L.P. v. Willoth*, 176 F.3d 630 (2d Cir. 1999) *citing Town of Amherst v Omnipoint Communications,* 173 F.3d 9 (1st Cir 2 1999). And a denial is merited where the applicant has identified other potential sites, but stated in conclusory fashion that they were unfeasible and stated...that it was unable to build a less intrusive structure.... *Omnipoint, supra.*

B. AT&T Failed To Submit Any Probative Evidence to Establish the Need For the Proposed Facility at the Height and Location Proposed

AT&T failed to meet its burden of proving that: (1) a significant gap in service exists;

(2) its facility would remedy that gap; (3) the proposed tower is compatible with the surrounding community; (4) its proposed placement would minimize the aesthetic impact within the meaning of the applicable sections of the Code; and (5) a denial of its application would constitute a "prohibition of personal wireless services" within the meaning of 47 U.S.C.A. §332(7)(B)(i)(II).

Glaringly absent from AT&T's application is any "*hard data,*" which could easily be submitted by the applicant, as *probative evidence* to establish that: (a) there is an actual gap in service which (b) necessitates the construction of a *new* facility, (c) and which requires it to be built at the specifically proposed location, and (d) on the specifically chosen site (as opposed to being built upon any alternative, less-intrusive locations).

AT&T has failed to prove that the proposed location is the best possible location to remedy a significant gap in personal wireless service because no significant gap in service even exists.

Without any meaningful data whatsoever, it is impossible for the City to comply with the smart planning requirements set forth in its own Code. Furthermore, without any data, the City cannot ascertain whether the proposed location is the least intrusive means of providing personal wireless service to the community because they have no idea where any possible significant gaps may or may not exist. It would be entirely irresponsible and illogical for the City to grant applications for the installation of wireless telecommunications facilities without even knowing where such facilities are actually needed.

(i) FCC and California Public Utilities Commission

Recently, both the FCC and the California Public Utilities Commission have recognized the ***absolute need*** for hard data rather than the commonly submitted propagation maps, which can easily be manipulated to exaggerate need and significant gaps.

As is discussed within the FCC's July 17, 2020, proposed order, FCC-20-94, "[i]n this section, we propose requiring mobile providers to submit a statistically valid sample of on-the-ground data (*i.e.*, both mobile and stationary drive-test data) as an additional method to verify mobile providers' coverage maps."[5] The FCC defines drive tests as "tests analyzing network coverage for mobile services in a given area, i.e., measurements taken from vehicles traveling on roads in the area."[6] Further within the FCC's proposed order, several commenting entities also agree that drive test data is the best way to ascertain the most reliable data. For example: (i) "City of New York, California PUC, and Connected Nation have asserted that on-the-ground data, such as drive-test data, are critical to verifying services providers' coverage data…;"[7] (ii) California PUC asserted that 'drive tests [are] the most effective measure of actual mobile broadband service speeds';"[8] and (iii) "CTIA, which opposed the mandatory submission of on-the-ground data, nonetheless acknowledged that their data 'may be a useful resource to help validate propagation data…'"[9]

California PUC has additionally stated that "the data and mapping outputs of propagation-based models will not result in accurate representation of actual wireless coverage"

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[5] *See* page 44 paragraph 104 of proposed order FCC-20-94.
[6] *See* page 44 fn. 298 of proposed order FCC-20-94.
[7] *See* page 45 fn. 306 of proposed order FCC-20-94.
[8] *Id.*
[9] *Id.*

and that based on its experience, "drive tests are required to capture fully accurate data for mobile wireless service areas."[10]

Moreover, proposed order FCC-20-94, on page 45, paragraph 105, discusses provider data. Specifically, the FCC states:

> *"The Mobility Fund Phase II Investigation Staff Report*, however, found that drive testing can play an important role in auditing, verifying, and investigating the accuracy of mobile broadband coverage maps submitted to the Commission. The *Mobility Fund Phase II Investigation Staff Report* recommended that the Commission require providers to "submit sufficient actual speed test data sampling that verifies the accuracy of the propagation model used to generate the coverage maps. *Actual speed test data is critical to validating the models used to generate the maps.*"

(Emphasis added)

Most importantly, on August 18, 2020, the FCC issued a final rule in which the FCC found that requiring providers to submit detailed data about their propagation models will help the FCC verify the accuracy of the models. Specifically, 47 CFR §1.7004(c)(2)(i)(D) requires "[a]ffirmation that the coverage model has been validated and calibrated at least one time using on-the-ground testing and/or other real-world measurements completed by the provider or its vendor."

The mandate requiring more accurate coverage maps has been set forth by Congress. "As a result, the U.S. in March passed a new version of a bill designed to improve the accuracy of broadband coverage maps."[11] "The Broadband Deployment Accuracy and Technological

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[10] https://arstechnica.com/tech-policy/2020/08/att-t-mobile-fight-fcc-plan-to-test-whether-they-lie-about-cell-coverage/

[11] https://www.cnet.com/news/t-mobile-and-at-t-dont-want-to-drive-test-their-coverage-claims/

Availability (DATA) Act requires the FCC to collect more detailed information on where coverage is provided and to 'establish a process to verify the accuracy of such data, and more.'"[12]

However, despite Congress's clear intent to "improve the quality of the data,"[13] several wireless carriers, have opposed the drive test/real-world data requirement as too costly.

"The project – required by Congress under the Broadband DATA Act – is an effort to improve the FCC's current broadband maps. Those maps, supplied by the operators themselves, have been widely criticized as inaccurate."[14]

If the FCC requires further validation and more accurate coverage models, there is no reason this City should not do the same. For the foregoing reasons, dropped call records and drive test data are both relevant and necessary.

(ii) Hard Data and the Lack Thereof

Across the entire United States, applicants seeking approvals to install wireless facilities provide local governments with *hard data,* as both: (a) actual evidence that the facility they seek to build is necessary and (b) actual evidence that granting their application would be consistent with smart planning requirements.

The most accurate and least expensive evidence used to establish the location, size, and extent of both *significant gaps* in personal wireless services, and areas suffering from *capacity deficiencies*, are two specific forms of *hard data*, which consist of: (a) dropped call records and

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[12] *Id.*
[13] *Id.*
[14] https://www.lightreading.com/test-and-measurement/verizon-t-mobile-atandt-balk-at-drive-testing-their-networks/d/d-id/763329

(b) actual drive test data. Both local governments and federal courts in California consider hard data in order to ascertain whether or not a significant gap in wireless coverage exists at that exact location.

It must be remembered that a propagation study is only a predictive model of signal strength and coverage. The programs that create the studies use thousands, perhaps millions of calculations and are dependent on the program used and the input parameters defined by the person running the program. Accordingly, the result is only as good as the data input into the program. Additionally, as here, propagation maps usually do not represent *all* frequencies available to the carrier. Lack of one frequency does not mean there is a lack of service in one or more other frequencies.

In fact, unlike "expert" reports, RF modeling, and propagation maps – all of which may be manipulated to reflect whatever the preparer wants them to show – *hard data* is straightforward and less likely to be subject to manipulation, unintentional error, or inaccuracy. Dropped call records are generated by a carrier's computer systems. They are typically extremely accurate because they are generated by a computer that already possesses all of the data pertaining to dropped calls, including the number, date, time, and location of all dropped calls suffered by a wireless carrier at any geographic location and for any chronological period. With the ease of a few keystrokes, each carrier's system can print out a precise record of all dropped calls for any period of time, at any geographic location. It is highly unlikely that someone could enter false data into a carrier's computer system to materially alter that information.

In a similar vein, actual drive test data does not typically lend itself to the type of manipulation that is almost uniformly found in "computer modeling," the creation of hypothetical propagation maps, or "expert interpretations" of actual data, all of which are so subjective and easily manipulated that they are essentially rendered worthless as a form of probative evidence. Actual raw drive test data consists of actual records of a carrier's wireless signal's actual recorded strengths at precise geographic locations.

As reflected in the records, AT&T has not provided any type of *hard data* as probative evidence, nor has it presented any form of data whatsoever, despite being in possession of such data. For example, AT&T could – and should – provide documentation regarding the number of residents who would benefit from the proposed tower, or information regarding the number and kinds of customer service complaints. "The substantial evidence analysis requires the Court to look for 'such relevant evidence as a reasonable mind might accept as adequate to support a conclusion' that a significant gap in service exists. *New Cingular Wireless PCS v. City of West Covina*, 2023 WL 4422835 (C.D. Calif. 2023) *quoting* Metro PCS, *supra.* Clearly, the actual number of people who would benefit from the proposed tower as well as information regarding actual service complaints and/or dropped calls, would be the best indicators of a significant gap in service.

C. AT&T's Analysis Regarding Its Wireless Coverage Is Contradicted By Their Own Actual Coverage Data

As is a matter of public record, AT&T maintains an internet website at https://www.att.com. In conjunction with its ownership and operation of that website, AT&T maintains a database that contains geographic data points that cumulatively form a geographic

inventory of their actual *current* coverage for wireless services.

As maintained and operated by AT&T, that database is linked to AT&T's website, and is the data source for an interactive function, which enables users to access AT&T's own data to ascertain both: (a) the existence of AT&T's wireless coverage at any specific geographic location, and (b) the level, or quality of such coverage.

AT&T's interactive website translates their *actual coverage data* to provide imagery whereby areas that are covered by AT&T service are depicted in various shades of blue, and areas where AT&T has a lack (or gap) in coverage, are depicted in white. The website further translates the data from AT&T's database to specify the actual *service level* at any specific geographic location.

A copy of AT&T's coverage map for the area around 350 Amber Drive, San Francisco, CA can be viewed on AT&T's website and is also attached as **Exhibit "D."** This Exhibit was obtained and printed on September 9, 2025, from AT&T's website.

On its website, the coverage map shows, based on AT&T's *own* data, that there is no significant coverage gap in AT&T's service at 350 Amber Drive, or anywhere around or in close proximity to it. The coverage map indicates solid levels of service.

This is in stark contrast to the claims made by AT&T in its submission, allegedly supported by their propagation maps. This obvious contrast between the claims made on AT&T's website in order to sell its services to the public and the claims made by AT&T in order to sell its proposed tower to this Board is striking. If nothing else, these differences demonstrate the ease with which data can be manipulated to suit a particular purpose.

In addition, annexed as **Exhibit "E"** is a map maintained by the FCC, accessible on

their website and based on data provided directly by AT&T. This Exhibit was obtained and printed on September 12, 2025, and shows that there are no coverage gaps at or near 350 Amber Drive, San Francisco, CA.

Both **Exhibits "D"** and **"E"** are based on AT&T*s* own data and as such, at the very least should be treated as statements against interest.

D. *ExteNet Systems, Inc. v. Village of Flower Hill and Flower Hill Board of Trustees*

On July 29, 2022, the Federal District Court for the Eastern District of New York issued an informative and instructive decision that reiterates the holding in another authoritative and widely cited case, *Willoth, supra.* Although not binding on Courts in the state of California, the case is nonetheless persuasive. The Judge noted that while "improved capacity and speed are desirable (and, no doubt, profitable) goals in the age of smartphones, … they are not protected by the [TCA]." *ExteNet Systems, Inc. v. Village of Flower Hill*, No. 19-CV-5588-FB-VMS (E.D.N.Y. July 29, 2022). In the *Flower Hill* case, the Board found significant adverse aesthetic and property values impact and, most importantly, no gap in wireless coverage and, therefore, no need even to justify the significant adverse impacts. Quoting *Omnipoint, supra,* the Court found that the lack of "public necessity" can justify a denial under New York law. "In the context of wireless facilities, public necessity requires the provider 'to demonstrate that there was a gap in cell service, and that building the proposed [facility] was more feasible than other options.'" *Id.* Further, the Judge held that "as with the effective prohibition issue, the lack of a gap in coverage is relevant here and can constitute *substantial evidence* justifying denial…And, since one reason

given by the Board for its decision was supported by substantial evidence, the Court need not evaluate its other reasons." *Id., (emphasis supplied).*

The applicant bears the burden of proof and must show that there is a significant gap in service – not just a lack of a *particular frequency* of service, *i.e.,* 5G service. A cell phone is able to "downshift" – that is, from 5G to 4G or from 4G to 3G, etc. – if necessary to maintain a call throughout coverage areas. Unless there is an *actual* gap, the call will continue uninterrupted. Therefore, there's only a significant gap when there is ***no service at all***. *Id.*

Similarly, in this instance, in addition to the clear adverse impact on the neighboring properties, AT&T has failed to produce any evidence of a truly *significant gap* in wireless service. Showing a gap in a particular frequency is not sufficient. ***All*** frequencies must be absent for a significant gap to exist. AT&T has failed to meet this burden, and thus their application should be denied.

POINT V

AT&T's Application Should Be Denied Due to Geological Concerns With the Proposed Site

The proposed construction of a cell tower at 350 Amber Drive raises serious concerns due to the unique geological vulnerabilities of the site. This location, previously under the jurisdiction of the San Francisco School District and later transferred to the San Francisco Police Department, has a well-documented history of seismic instability. A seismic report was commissioned during the transition of the property specifically to assess these risks, highlighting the area's complex terrain, including underlying ravines and the presence of landfill. (*See* **Exhibit "F"**) These features are known to amplify ground motion during seismic events,

significantly increasing the risk of structural failure. Building a cell tower—a tall, narrow structure with a high center of gravity—on such unstable ground introduces the very real danger of collapse in the event of an earthquake.

The seismic report created during the property's transfer emphasized the necessity of specially engineered foundations and reinforced structural elements for any future developments. This suggests that even relatively modest structures require significant precautions to ensure their safety and stability in this area. Constructing a cell tower, which involves considerable vertical load and wind resistance factors, would demand even more rigorous design and engineering standards to withstand the geological challenges posed by the site. Without detailed public review and new seismic analysis, allowing such a tower to be built could result in catastrophic consequences—not only to the structure itself, but to nearby homes, infrastructure, and residents in the event of seismic activity.

Furthermore, the geological instability of the area, particularly due to its composition of landfill and natural ravines, means that the ground may not respond uniformly to seismic forces. This non-uniformity can create unpredictable stress points and lead to differential settlement or shear failure at the base of a tower. Such conditions dramatically increase the likelihood of a collapse or major structural damage during even moderate earthquakes. Given the seismic history of the San Francisco region, these risks are not theoretical—they are statistically probable over the expected life of the tower. For these reasons, it would be irresponsible and potentially hazardous to move forward with construction on a site with such a precarious geological foundation.

POINT VI

To Comply With the TCA, AT&T's Application Should Be Denied in a Written Decision Which Cites the Evidence Provided Herewith

The Telecommunications Act of 1996 requires that any decision denying an application to install a wireless facility: (a) be made in writing, and (b) be made based upon substantial evidence, which is discussed in the written decision. *See* 47 U.S.C.A. §332(c)(7)(B)(iii).

A. The Written Decision Requirement

To satisfy the requirement that the decision be in writing, a board must issue a written denial which is separate from the written record of the proceeding, and which contains a sufficient explanation of the reasons for the denial to allow a reviewing court to evaluate the evidence in the record supporting those reasons. *See, e.g., MetroPCS v. City and County of San Francisco,* 400 F.3d 715 (2005).

B. The Substantial Evidence Requirement

To satisfy the requirement that the decision be based upon substantial evidence, the decision must be based upon such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.

The most authoritative and widely quoted explanation of the TCA's "substantial evidence" requirement comes from *Cellular Tel. Co. v. Town of Oyster Bay*: "substantial evidence implies 'less than a preponderance, but more than a scintilla of evidence'." 166 F.3d 490 (2d Cir. 1999). *See also, GTE Mobilnet, supra.* Substantial evidence "means such relevant

evidence as a reasonable mind might accept as adequate to support a conclusion." *Id., quoting MetroPCS, Inc. v. City and Cty. of San Francisco,* 400 F.3d 715 (9th Cir. 2005). Thus, these interested homeowners have met their burden of proving that AT&T failed to offer sufficient evidence to warrant granting their application and it should be denied.

To ensure that the City's decision to deny this application cannot be challenged under the Telecommunications Act of 1996, it is respectfully requested that the Board deny AT&T's application in a written decision wherein the Board cites the substantial evidence upon which it based its determination.

C. The Non-Risks of Litigation

All too often, representatives of wireless carriers and/or site developers try to intimidate local zoning officials with either open or veiled threats of litigation. These threats of litigation under the TCA are, for the most part, entirely hollow.

This is because, even if they file a federal action against the City and win, the Telecommunications Act of 1996 does not entitle them to recover compensatory damages or attorneys' fees, even if they get creative and try to characterize their cases as claims under 42 U.S.C. §1983.[15]

This means that if they were to sue the City and win, the City would not be liable to pay them anything in damages or attorneys' fees under the TCA.

Typically, the only expense incurred by the local government is its own attorneys' fees. Since federal law mandates that TCA cases proceed on an "expedited" basis, such cases typically

[15] *See City of Rancho Palos Verdes v. Abrams*, 125 S.Ct 1453 (2005), *Network Towers LLC v. Town of Hagerstown*, 2002 WL 1364156 (2002), *Kay v. City of Rancho Palos Verdes*, 504 F.3d 803 (9th Cir 2007), *Nextel Partners Inc. v. Kingston Township*, 286 F.3d 687 (3rd Cir 2002).

last a comparatively short time. As a result of the brevity and relative simplicity of such cases, the attorneys' fees incurred by a local government are typically quite small, compared to virtually any other type of litigation.

Conclusion

AT&T has not proven that a need even exists in the area where they propose to install their cell tower. No significant gap has been demonstrated. Nor has AT&T proven that the proposed facility is the least intrusive means of remedying the purported significant gap in service coverage, and they have not shown that a meaningful, good faith inquiry was made as to whether the proposed facility is the least intrusive alternative.

These facts together with the clear adverse impacts – both aesthetic and financial – which will befall the nearby residents, and which will affect the character of the of the entire community can result in only one thoughtful, considered decision. It is respectfully submitted that the decision must be a denial of AT&T's application.

For the foregoing reasons, we respectfully request that AT&T's application be denied in its entirety.

Dated: San Francisco, CA
September 15, 2025

Respectfully Submitted,

Marcia Sanchez, et. al.

From: FRED RANDOLPH
To: BOS Legislation, (BOS)
Subject: File No. C251098/AT&T Monopole at 350 Amber Drive
Date: Sunday, November 30, 2025 5:26:37 PM
Attachments: Opposition Letter To Monopole.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,
I am writing to you regarding File #C251098. I am respectfully urging you to grant the appeal to overturn the Planning Commissioners' vote on 9/25/25 to approve AT&T's installation of macro tower at 350 Amber Drive.
Along with 72 neighbors, we submitted a packet of opposition to the Planning Commissioners to voice our opposition. I am attaching the letter I wrote with my wife stating our strong objection to the installation of this monstrous monopole. What we, along with several members of the community, stated in our letters of opposition are still relevant and important reasons (seemingly ignored by 4 members of the Planning Commission) why the approval of this massive antenna structure must be overturned. This intrusive macro tower will not only loom over the nearby homes - sticking out like a sore thumb - but also endanger the residents and the unique wildlife of the area. It will forever change the unique character of our harmonious community and pose a serious safety threat and fire hazard. It is neither necessary nor desirable.
AT&T is not looking out for the city's or citizens' interests or concerns. They have shown no compelling reason why this mammoth monopole must be placed in this specific location nor that it is the only viable option. There are other more effective and less intrusive options, such as fiber optics, the latter of which is a safer and more secure alternative. In addition, the contract with the city will allow AT&T to add rings of antennas to the structure at will, forever eroding the landscape, environment, and character of the community.
In addition, wireless companies often cite the need for emergency communications as the rationale for installing new wireless towers. In fact, at the public hearing, AT&T asserted the need to boost FIRST NET for first responders as justification for building the macro tower at 350 Amber Drive. This reasoning convinced 4 out of the 7 Planning Commissioners to approve AT&T's CUA. Unfortunately, AT&T misled the Planning Commissioners because the police and fire departments do not require that first responders use FIRST NET.
There are also serious safety and fire hazard concerns associated with the placement of this tower. This huge monopole will be built on a site comprised of landfill, attendant with a history of sinking and seismic instability, in a very windy area. This will therefore increase the probability of collapse and fire, especially in a city known for earthquakes. The disaster will be unfathomable.
It appears as though AT&T is more interested in capturing a share of the multi-million dollar telecom industry than it is in enhancing and protecting the community. AT&T will profit while the community, unfortunately, will pay the price. Please grant the appeal.

Sincerely,
Fred Randolph
950 Duncan St. #E101
San Francisco, CA 94131
510-504-6457

Marcia Sanchez and Fred Randolph
950 Duncan St., Unit 101E
San Francisco, CA 94131

June 20, 2024

San Francisco Planning Department
49 S Van Ness Ave, Suite 1400
San Francisco, CA 94103

RE: Installation of a Monopole at 350 Amber Dr., San Francisco, CA 94131

Dear Planning Commissioners,

We are writing to state our opposition to the proposed installation of a 104-foot monopole at 350 Amber Dr., a location near residences, churches, a preschool, and playgrounds. Indeed, this monopole will be a mere 528 feet from where we reside.

Having such a behemoth of a monopole is quite distressing due to the negative aesthetic impact it will have on our home and the entire neighborhood, as well as the property value of our home. I, Marcia Sanchez, have lived in this pristine, quiet neighborhood since 2002 as a renter and as a homebuyer with my husband since 2008. My husband and I chose to buy in this neighborhood because of its greenery, aesthetic beauty, and serenity. We love that it is far from the hustle and bustle of most places in San Francisco, yet conveniently located near two major highways and other attractive neighborhoods.

The adverse impact this monopole will have is not to be underestimated. It will be visually and physically obtrusive and thus have a negative effect on the desirability and natural beauty of our neighborhood. It will further affect the landscape of the St. Nicholas Orthodox and Saint Aiden churches; the surrounding playgrounds; and residences.

In addition, our home is our greatest financial asset. We are depending on the value of our condominium to help fund our retirement and have thus engaged in many upgrades to our home. In the various articles, I have read concerning the matter, studies have shown that cell antennas near homes cause a drop in property values. Any decrease would impair our ability to fund our retirement to the fullest.

Allowing AT&T to steal any value of our home by placing an unwanted monopole so near to our place of residence does a disservice to the community and to us. Our home values are our equity that we have labored so hard to build.

We therefore urge you to reject AT&T's proposal in its entirety and find a more appropriate site, far away from our charming neighborhood.

Thank you for your attention to this matter.

Sincerely,

Fred Randolph & Marcia Sanchez

Fred Randolph and Marcia Sanchez

From: Mary Foley
To: BOS Legislation, (BOS)
Subject: Appeal Conditional Authorization at 350 Amber Drive
Date: Sunday, November 30, 2025 4:04:08 PM
Attachments: Mary FoleyJuly 14.docx

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am attaching my previous letter to the Planning Commission on this topic. My comments are still relevant and include reasons why approval of this massive antenna structure must be overturned.
The Planning Commission was misinformed by AT&T that this antenna was NECESSARY to support FIRST NET. It is not required by San Francisco police or fire. A structure of this size is not necessary.
If San Francisco decides to use FIRST NET, there are signal boosters available that would be sufficient.
This proposed structure is also not DESIRABLE from an aesthetic and safety perspective. It will obscure views and be a major fire risk in our windy neighborhood.
Please support the appeal of the CUA.

Respectfully:
Mary Foley, RN
963 Duncan Street
San Francisco, CA 94131

Sent from Mary's iPad

July 14, 2025

To: SF Planning Commissioners
49 South VanNess AV SF CA 95103

Chair So, Vice-Chari Moore, & Commissioners Braun, Williams, Campbell, Imperial, McGarry:
Cc: Commission Exec Director, Commission Secretary, John Darcey Planner, Department of Rec
From: Mary Foley PhD RN 963 Duncan Street
RE: OPPOSE: AT*T proposal telecommunication facility at 350 Amber in Diamond Heights Neighborhood less than 500 feet from homes along Duncan*

Commissioners San Francisco is a very special place to live, and you are charged with protecting that with careful planning. Diamond Heights the first Redevelopment Agency *planned* neighborhood. It took over 20 years to plan and develop. The design

Imagine, waking up, not checking your email, but and looking out your living room window to watch the blanket of fog lining Glen Canyon with the trees poking through before the sun drinks it up for only short sunny periods revealing tall majestic old trees right across the street and farther away across the canyon. Or imagine late in the afternoon on a windy day – and there are many such days in Diamond Heights, imagine the Eucalyptus trees swaying like exotic dancers from side to side in the wind (many of the trees have been cut down in Christopher Playground and Glen Canyon for safety in the past 5 years some over 100 years old)

That's what the architects of the many homes on Duncan, Amber and Turquoise streets and the condominiums above Glen Canyon possibly imagined as they planned the front of the duplexes on Duncan to be packed together like plain boxes with the backs full of windows onto Glen Canyon just behind (west) of the Police Academy. Residents on Turquoise, which curves with the shape of the hill, can almost reach across the street and scoop off the morning fog and can hear the old trees creek in the wind (which gusts up to 50MPH). Neighbors in the condos above Duncan cherish the view out over and across Glen Canyon and some Christopher playground and the tennis courts.

This is the only "wild canyon" view in our City, where the coyotes yelp and the microclimates vary from dry grass on rocky soil to a lush creek bed and many trees in the bottom of the canyon where a day care school takes children outdoors directly into nature. The day care cooperative in Christopher Park at the top of the Canyon next to the Police Academy was just renovated and children and families can enjoy age appropriate play areas as well walk and sit along the ball field – which is bordered on one side by the trees described in this proposal and which would be instead dominated up close by a 104foot high gigantic electrical structure towering 20feet above the trees. This 10-story electrical structure and cannot possibly "**be designed to be compatible with the surrounding nature of the vicinity. The proposed monopole will be painted brown and be located adjacent to a grove of Eucalyptus trees to minimize visual impacts**" as described in the "EXECUTIVE SUMMARY Conditional Use AUTHORIZATION & SHADOW FINDINGS." *It's not just a brown pole; it's a structure with lots of apparatus on it cannot hide behind 3 (not a grove) of Eucalyptus trees. BTW the Eucalyptus trees in the area are an important part of SF History – look up the "gum show girls" who started*

San Francisco's botanical preservation when families came to this neighborhood in the 1920s to camp among nature. Nature is still important 100 years later. The application and the CEQA review does not address how these trees will be protected and preserved. ***It also does not address hazardous materials on the site.***

My partner and I are both nurses and have lived on Duncan Street since 1998. I worked at St Francis and then UCSF (now at the VA) and she worked at SFGH, then for the Mayor and then ran the Health Service System. We fell in love with our home **because of the view from our living room, our dining room and our deck overlooking the edge of Glen Canyon** (behind the Police Academy) **and across the canyon**. Our work was/is stressful and peaceful vistas and surroundings are very important to us. We've lived here have walked our dogs in the neighborhood overlooking the canyon, around Christopher Park everyday and down and up the canyon. *There will be few vistas from where this proposed 104' structure will not dominate the sky above our natural environment. Kids playing on the playground need to be in nature – not on a field with a 10 story electrical tower hanging over it. The irony that we encourage families to get their children outside in nature and OFF screens may be literally overshadowed by a wireless monstrosity supposedly needed for screens should not be lost.*
Again, the EXECUTIVE SUMMARY states: "The overall location, setback from public streets, height and design of the proposed facility, **including visible screening elements is situated so as to avoid intrusion into public vistas, and to ensure harmony with the existing neighborhood character and promote public safety.** *It is set back from the street level at the top of an open space park,– but the surrounding homes with precious vistas are above the street level.* ***This IS AN INRUSION INTO PUBLIC and Private VISTAS.*** *It does NOT harmonize with the existing neighborhood character and finally: it creates a safety hazard because the trees are very very close to the proposed "structure" and as mentioned they sway significantly when it's windy, and it's windy much of the time in the "heights" (as mentioned earlier, Rec & Park has been cutting down trees for safety reasons, these trees are unlikely to last the length of what I assume (because I couldn't find it in the proposal) is a 30 year lease. Further many many fires have occurred in an around wireless facilities some caused by wind (Malibu), some caused by trees (northern CA 2023) to name only a couple of CA fires! Eucalyptus is a torch because of its high oil content. Adding an electrical structure, an ignition grid, not to mention a 190 gallon diesel fuel tank and a generator to this are* ***a is a fire waiting to happen and is just plain dangerous and certainly does not "promote public safety."***

The statement that: "the AT&T Mobility Radio Frequency Engineering Team provide that the Project Site is a preferable location, based on factors including quality of coverage and *aesthetics"* is unfounded!*. The proposed structure and surrounding cabinets and tanks are NOT aesthetically acceptable to the neighborhood.* Further ATT asserts: "the proposal would not be detrimental to the health, **safety**, convenience, or general welfare of persons residing or working in the vicinity". *Again, health and safety: health, diesel emissions create particulate matter associated with cancer and other pulmonary maladies, the Police Academy trainees use the building that is just feet away from the "the fuel tank and the 10 story structure" for exercise training and quiet study. The day care center in Christopher park will be effected by the diesel emissions.*

"Nature of proposed site, including its size and shape, and the proposed size, shape and arrangement of structures….. The proposed antennas will be mounted on the proposed 104-foot

tall monopole." *Monopole is a misleading description of the structure holding the monopole up.* "The **associated equipment cabinets will be located behind the police academy and not visible from the public street."** *This is wrong: People will see the associated* ***equipment cabinets and fences and the 190 gallon diesel fuel tank and generator. Walkers, joggers, hikers, picnickers, families trying to enjoy nature will see these structures. Having a fuel tank creates a greater fire danger and diesel fuel creates known health dangers. Towers often emit high pitched noise which is disorienting for wild life, and the generators are noisy.*** *If ATT states that the generator is a back up, where is the electricity coming from, who is paying for it and how will it affect our unreliable power grid?*

The Exec Summary states regarding **"**Treatment given, as appropriate, to such aspects as landscaping, screening, open spaces, parking and loading areas, service areas, lighting and signs; The facility **will not affect** landscaping, **open space,** required parking, lighting or signage at the Project Site or surrounding area.
Open space is not just the ground it's the sky, the vistas. It ***will affect the open space above the tree line and at the edge of the playground and park No one wants to sit in the playground and watch kids play under under a giant electronic structure. It ruins the aesthetic character of the playground and the canyon park.***

Conforming with the General Plan
D. "That the use as proposed would provide development that is in conformity with the purpose of the applicable Zoning District. "The Project at 350 Amber Drive is **generally desirable and compatible with the surrounding neighborhood** because the Project **will not conflict with the existing uses of the property** and will be designed to be **compatible with the surrounding neighborhood.** The overall location, setback from public streets, **height and design of the proposed facility, are situated so as to avoid intrusion into public vistas**, and to **ensure harmony with the existing neighborhood character and promote public safety."**
This is absolutely not factual: the height (104 fee t)and design is 20 feet above the tree line which impedes public vistas and interrupts the harmony of the existing neighborhood character.

"There is an existing coverage gap in the AT&T Mobility wireless telecommunications network caused by inadequate infrastructure in the area. A new facility is necessary to close the service coverage gap in the network area bordered by the intersection of Amber Drive and Turquoise Way, O'Shaughnessy Blvd to the south and west, and Diamond Heights Blvd to the east. This gap area includes numerous homes, businesses in the Diamond Heights Shopping Center, well-traveled roads, Glen Canyon Park, St. Nicholas Antiochian Orthodox Church and other points of interest in the vicinity"
The fact is that ***the coverage gap is caused by the hills and trees in surrounding the area and is not a consistent gap, the Diamond Hts Shopping Center declined to cite telecommunications facilites on their property.***
Find another location to address where there is a coverage gap. *We've had ATT as long as we've had internet. We use our devices in the park. We do not have a coverage gap. On April 10 at the meeting the ATT representative (who by the way never answered many of our questions and still hasn't) said ATT had only 5,000 customers in the area****. This TOWER is for ATT customers only and is a detriment to our property values, our fire safety, our***

property insurance premiums (which according to the Chronicle on June 20 have increased 42% in the last six years.

More on the compliance with the "General Plan"

- **General Plan compliance**

"The Project is, on balance, consistent with the following Objectives and Policies of the General Plan: RECREATION AND **OPEN SPACE ELEMENT** Objectives and Policies
OBJECTIVE 1 ENSURE A WELL-MAINTAINED, HIGHLY UTILIZED, AND I**NTEGRATED OPEN SPACE SYSTEM**
Policy 1.10 **Ensure that open space is safe and secure for the City's entire population.**
"The Project will improve AT&T's coverage and capacity within George Christopher Playground and Glen Canyon Park, and in the Diamond Heights neighborhood."
ATT coverage has nothing to do with open space - this will damage the natural surroundings of Christopher playground and Glen Canyon Park. Open space includes the sky and the skyline. We should not look up or out at a 10 story antenna structure or have electrical cabinet structures next to the playground with "caution signs warning of radiation beyond FCC approved levels".

OBJECTIVE 2 MAINTAIN AND ENHANCE A SOUND AND DIVERSE ECONOMIC BASE AND FISCAL STRUCTURE FOR THE CITY. Policy 2.1**Seek to retain existing commercial and industrial activity and to attract new such activity** to the city. Policy 2.3**Maintain a favorable social and cultural climate in the city in order to enhance its attractiveness as a firm location**. "The Site will be an integral part of a new wireless communications network that will enhance the City's diverse economic base".
This is wrong, the area is not commercial, it's housing and a park.

OBJECTIVE 4 IMPROVE THE V**IABILITY OF EXISTING INDUSTRY** IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY. "Policy 4.1 Maintain and enhance a favorable business climate in the City. Policy 4.2 Promote and attract those economic activities with potential benefit to the City. **"The Project will benefit the City by enhancing the business climate through improved communication services for residents and workers."**
The project has nothing to do with business climate. It will create hardship in the increased cost to homeowners' property insurance and decrease property value!

Objective 3:ESTABLISH STRATEGIES TO ADDRESS THE IMMEDIATE EFFECTS OF A DISASTER " The Project will enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services.
It will NOT enhance the ability of the City to protect both life and property from the effects of a fire or natural disaster by providing communication services. These antennas are ONLY for the 5,000 ATT customers (unless ATT rents additional to other carriers). Wireless is undependable in emergencies when all the "bandwidth" is crowded. WIRED to the premises is the only way to ensure access to the internet in emergencies. In addition, the size and location of this electric structure is more likely to cause an emergency: fire in strong winds and Glen Canyon's terrain and dry grass vegetation.

16. Planning Code Section 101.1(b) establishes **eight priority-planning policies and requires review of permits for consistency with said policie**s. “On balance, the project complies with said policies in that: A. That **existing neighborhood-serving retail uses be preserved and enhanced and future opportunities** for resident employment in and ownership of such businesses be enhanced. The wireless communications network will enhance personal communication services for businesses and customers in the surrounding area.” *The surrounding retail businesses are stores, post office, cafes - this has nothing to do with enhancing business and customers.*
B. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods.
This is untrue. The cultural character of this neighborhood is the recreating and enjoying nature in Christopher Playground and Glen Canyon Park. These “cultural characteristics” will be profoundly altered by placing a 10 story antenna complex at the edge of these two parks.”
*“*No **residential uses will be displaced or altered** in any way by the granting of this Authorization.”
Again untrue: ***looking out onto a park or canyon from one’s residence IS A RESIDENTIAL USE and it will be replaced by an ugly giant structure 20 feet above the tree line.***

C. That the City's supply of affordable housing be preserved and enhanced, “The Project will have no adverse effect on housing in the vicinity*”. On the contrary, the project will increase property insurance premiums and will decrease property values resulting in unaffordable rents.*

E. That a diverse economic base be maintained by **protecting our industrial and service sectors** from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced. “The Project will not cause any displacement of industrial and service sector activity.” *TRUE BECAISE this is not an industrial service area it’s a residential area with a playground and a park.*

F. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake. “The Project will be designed and will be constructed to conform to the structural and seismic safety requirements of the Building Code. This proposal will not impact the property’s ability to withstand an earthquake”. *Does the building code have seismic safety requirements for 104 foot towers loaded with heavy electrical equipment alongside a 109-gallon diesel fuel tank and generator?*

H. That our **parks and open space and their access to sunlight and vistas be protected from development. “**Although the Project does cast additional shadow on two adjacent public parks(George Christopher Playground and Glen Canyon Park), both parks are still afforded access to sunlight, and any additional shadows should not dramatically affect the use and enjoyment of either park. A study of the shadow impacts as required per Planning Code Section 295was completed. The Recreation and Park Commission reviewed the shadow analysis and issued a resolution recommending to the Planning Commission that the Project will not have significant adverse impact on the use of either park”.
Kids don’t just need sunlight, they need nature. It will have significant adverse impact on the vistas from above and within the playground and Glen Canyon Park. The natural vistas provide solace and peace and will be scarred by an ugly giant mechanical

spaceship like structure <u>on top of the trees</u> and bulky equipment along the border of the playground and park.

17. The Project is consistent with and would promote the general and specific purposes of the Code provided under Section 101.1(b) in that, "**as designed, the Project would contribute to the character and stability of the neighborhood** and would constitute a beneficial development*."*
This is NOT true it will detract from the aesthetics, character and stability of the neighborhood. It is NOT a beneficial development

18. The Commission hereby finds that approval of the Conditional Use Authorization would promote the health, safety and welfare of the City. ***It will endanger the health, safety, of the residents as previously described and decrease the tax base as property values decrease.***

Commission's Guidelines on where facilities should be located:

In the Executive Summary it states that "The Commission's guidelines on where facilities should be located include:
3. Industrial or Commercial Structures: buildings such as warehouses, factories, garages, service stations.
4. Industrial or Commercial Structures: buildings such as supermarkets, retail stores, banks; and
5. Mixed-Use Buildings in High Density Districts: buildings such as housing above commercial or other non-residential space.
The proposed location meets none of these priority guidelines for location.
A 10story antenna behind a building used for educating our police force (aka an adult school), on the edge of a playground, at the top of one of the two wild open spaces (where there is acute fire danger) in San Francisco used by hikers, and dog walkers, and home to diverse wildlife,does not comply with the Commission's guidelines.
The "guidelines also state that applications for Preference 5 or below Location Sites unless the application describes (a) what publicly-used building, co-location site or other Preferred Location Sites are located within the geographic service area; (b) what good faith efforts and measures were taken to secure these more Preferred Locations, (c) explains why such efforts were unsuccessful; and (d) demonstrates that the location for the site is essential to meet demands in the geographic service area and the Applicant's citywide networks.
The answer to these stipulations did not appear in the application

Who is liable should a fire be caused by this facility?
Has ATT presented a master plan as required regarding new networks in the City? Has the Planning Commission approved such a plan including all carriers?

The materials p. T2 describe diesel fuel and include signage on the chain link fence that states "caution RF (non-ionizing radiation) fields may exceed FCC general population limits" and "entering an area where RF fields may exceed FCC general population limits."
This facility is literally in the Police Academy parking area and next to a building that is in use. How large is the area where RF emissions might exceed the FCC limits?

Has and will the City measured RF in the vicinity before and will the city measure regularly unannounced after if the project is approved.
Is the Health Department or ATT responsible for ensuring the cell towers and “small” cells are compliant with FCC’s outdated (1996 and much has changed since then) limits? Will safety checks be made unannounced at different times of the day at least once a year and be publicly reported?
Will there be an emergency number staffed 24/7 posted?
If there is a fire, and or people or children are sickened or injured by any part of this project, who will bear the health costs?
Does ATT have insurance to cover liabilities from health damages and/or property damages? It’s my understanding that ATT Mobile Insurance states that coverage is excluded for pollutants which are defined as “any solid, liquid, gaseous or thermal irritant or contaminant including smoke, vapor, soot, fumes, acid, alkalis, chemicals, artificially produced electric fields, magnetic field, electromagnetic field, sound waves, microwaves and all artificially produced ionizing or non-ionizing radiation and waste. Does the Planning Commission intend for the City to assume these liability risks?

Telecom facilities are highly complex structures, and highly dangerous. I respectfully request that members of the planning commission carefully analyze both the risks to the community and the degradation of the neighborhood main attraction: the parks by placing a giant structure (the height of a 10 story building holding bulky equipment) at the edge of our precious parks NEAR homes and blocking the vistas for the public and for homes. The California Supreme court has ruled that . ***the City has inherent local police power to determine the appropriate uses of land within its jurisdiction****. That power includes the authority to establish aesthetic conditions for land use.* ***This proposed telecom facility aka “monopole” will deter from the aesthetic enjoyment of our neighborhood.***

Thank you for considering the concerns of this long time resident!

From: Robert Oren
To: BOS Legislation, (BOS)
Cc: Jary Porter
Subject: File No.C251098-Appeal of Conditional Authorization Use approval for 104' AT&T Monopole @ 350 Amber Drive in Diamond Heights
Date: Sunday, November 30, 2025 2:01:35 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Supervisors,

Please find my comments which were made to the Planning Commission before the Sept 25 meeting and unacknowledged by four of the Commissioners at the Sept 25 hearing (the vote was 4:3). They are still relevant and important reasons why the approval of this massive antenna structure must be overturned. An antenna of this size (10 stories) in a neighborhood zoned for four stories, belongs in a commercial or industrial area NOT in a residential neighborhood. This would be the only antenna over 100 feet tall in a residential neighborhood, the 2 existing antennas are in commercial areas. Other tall (but not reaching 100') antennas are near freeways, BART stations, or attached to tall buildings and NOT adjacent to parks.

This huge electric structure which will be 20' above the tree line, is not **"necessary"** there ***are*** **alternative locations and *less intrusive*antenna systems** *and* alternative ways to boost "FIRST NET" (for First Responders) – which was the reason 4 of the Planning Commissioners cited as their excuse to approve the structure. For the record: Police and Fire do not require First Responders to use FIRST NET, the Commissioners were misled by AT&T. AT&T wants this massive structure to increase their market share AND to likely add antennas and a second layer of ugly antennas to other carriers on this structure – they recently stated they would not rule out adding more antennas (making the structure heavier, more bulky and greater risk for landslides and fire in our windy neighborhood).

It is not **"desirable"** from a safety perspective, it is a major fire risk in an Wildfire/Wildland Urban Interface Area and is an area identified on the SF Landslide-Seismic hazard map. It will change the character of the neighborhood known for its open skies, nature and views of the playground and canyon. The danger of fire and exposure to Radio Frequency Radiation is not desirable for the wildlife in the canyon, flora and birds and insects and according to the 1996 Telecommunications Act RFR standards are not considered under the definition of "environment" the way humans are, in fact RFR affects avian life at a much lower frequency than humans not to mention antenna collisions to a massive tower built in the middle of a forest.

Undoubtedly this is *desirable* for AT&T to build their corporate coffers, but it is **NOT** desirable at the expense of residents in a neighborhood whose parks and nature bring us together.

We will be in attendance at the Tuesday, December 9th, 3:00PM public hearing before the Board of Supervisors, voicing our objections to this proposed corporate monstrosity in our beautiful neighborhood.

Sincerely,
Robert Oren
Gerald Porter
266 Amber Drive
San Francisco CA 94131

Sent from my iPhone

From: Marcia Sanchez
To: BOS Legislation, (BOS)
Subject: File #C251098/AT&T Monopole at 350 Amber Drive
Date: Sunday, November 30, 2025 1:26:21 PM
Attachments: OppositionLetterToMonopoleAsPDF.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors,
Attached is the letter I submitted, along with my husband, in opposition to AT&T's installation of a 104-foot monopole at 350 Amber Drive. It was included in an opposition packet submitted to the Planning Commissioners on 9/17/25 (for the 9/25/25 public hearing) by 72 neighbors, 2 former office holders, and real estate agents. Please consider these points when File # C251098 comes before you. I respectfully request that you diligently read and consider the facts made by concerned citizens in opposition to AT&T's construction of this massive monopole.
AT&T's project should not be granted a CUA because their application fails to satisfy the necessary findings required by the Planning Code. The proposed use and characteristic at the size and intensity stated by AT&T **is not necessary or desirable for - nor compatible with - the neighborhood and community.** In fact, installing such a large, industrial tower would represent an immutable and **intrusive departure** from the existing neighborhood cohesion.
Furthermore, there is no compelling argument that this specific location is the only viable option for the proposed macro tower. Indeed, there **are alternative locations and less intrusive systems,** as well as **alternative ways to boost "FIRST NET"** (for First Responders), the reason stated by four of the Planning Commissioners as their excuse to approve the structure. To wit: Police and Fire do not require First Responders to use FIRST NET. Thus, AT&T misled the Planning Commissioners. What is likelier is that AT&T wants this behemoth to increase their market share. Moreover, there is nothing in the CUA stopping AT&T from adding layers upon layers of antennas nor increasing the height by as much as 20 feet. This 10-story monopole really belongs in a commercial or industrial area, NOT in a residential neighborhood.
In addition, not only will the proposed macro tower be a visual imposition on the community, it would be **detrimental to the health, safety, and general welfare of the people and the unique flora and fauna in the vicinity.** It would negatively affect the environmental balance, quality of life, and character of the neighborhood; i.e., a neighborhood known for its open skies, nature, and stunning views of the playground and canyon.
Finally, AT&T's proposed siting of the macro tower is a **serious safety and fire hazard concern**. The location, a former school and now the Police Academy, has a well-documented history of seismic instability. A seismic report, completed upon transference of the land from the school to the Police Academy, underscored the risks, including the fact that the area is comprised of landfill and not the bedrock stated by AT&T. I cannot emphasize enough the danger of building a massive tower with its tall, slender structure and high center of gravity on such unstable and sinking ground, concomitantly situated in a very windy area. All of this produces a very real

danger of collapse and fire in the event of an earthquake, the latter of which San Francisco is unfortunately quite familiar. Disaster would immediately strike!
While this monstrous structure may be profitable for AT&T's pocket book, it will come at the cost of our close-knit community.
Sincerely,
Marcia Sanchez
950 Duncan Street
Unit 101E
San Francisco, CA 94131

Marcia Sanchez and Fred Randolph
950 Duncan St., Unit 101E
San Francisco, CA 94131

June 20, 2024

San Francisco Planning Department
49 S Van Ness Ave, Suite 1400
San Francisco, CA 94103

RE: Installation of a Monopole at 350 Amber Dr., San Francisco, CA 94131

Dear Planning Commissioners,

We are writing to state our opposition to the proposed installation of a 104-foot monopole at 350 Amber Dr., a location near residences, churches, a preschool, and playgrounds. Indeed, this monopole will be a mere 528 feet from where we reside.

Having such a behemoth of a monopole is quite distressing due to the negative aesthetic impact it will have on our home and the entire neighborhood, as well as the property value of our home. I, Marcia Sanchez, have lived in this pristine, quiet neighborhood since 2002 as a renter and as a homebuyer with my husband since 2008. My husband and I chose to buy in this neighborhood because of its greenery, aesthetic beauty, and serenity. We love that it is far from the hustle and bustle of most places in San Francisco, yet conveniently located near two major highways and other attractive neighborhoods.

The adverse impact this monopole will have is not to be underestimated. It will be visually and physically obtrusive and thus have a negative effect on the desirability and natural beauty of our neighborhood. It will further affect the landscape of the St. Nicholas Orthodox and Saint Aiden churches; the surrounding playgrounds; and residences.

In addition, our home is our greatest financial asset. We are depending on the value of our condominium to help fund our retirement and have thus engaged in many upgrades to our home. In the various articles, I have read concerning the matter, studies have shown that cell antennas near homes cause a drop in property values. Any decrease would impair our ability to fund our retirement to the fullest.

Allowing AT&T to steal any value of our home by placing an unwanted monopole so near to our place of residence does a disservice to the community and to us. Our home values are our equity that we have labored so hard to build.

We therefore urge you to reject AT&T's proposal in its entirety and find a more appropriate site, far away from our charming neighborhood.

Thank you for your attention to this matter.

Sincerely,

Fred Randolph & Marcia Sanchez

Fred Randolph and Marcia Sanchez

From:	TC
To:	BOS Legislation, (BOS)
Subject:	Opposition to AT&T Diamond heights monopole. Sent now from MY email address. Same letter but with correct return email. Take 2
Date:	Saturday, November 29, 2025 11:11:10 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors,

I live in Diamond Heights with my spouse, Betty Peskin, who has written you about her objections to the proposed monopole. Given time constraints and a deadline let me say that I share all of her concerns plus another I'll outline below:

I am in Christopher Park (doing tai chi weekly), walking in that park several times a week, and the same goes for Glen Park Canyon. I'm a frequent user. I wanted us to move up here from Noe Valley three decades ago primarily because of access to green space and the **spectacular** Glen Canyon Park.

Recently I completed the crosstown trail through Glen Park Canyon to inaugurate my 79th year. IMHO it was the highlight of the trail. I'm keenly interested in wildlife, especially birdlife. I sit in the Canyon to draw frequently as this is not a pastime but a passion. I've been a working artist for decades, so watching/drawing the birdlife in both parks has been a constant highlight of life in Diamond Heights.

I recognize there may not (yet) be hard science to support that owls and other birds do not "like" these poles that emit signals. I'm not a bird, so I can only imagine.

But as a very frequent hiker and user of these trails I can guarantee you that this pole **will** destroy the view as we hikers walk up the trail and while in Christopher Park. It's going to be, put bluntly, plain ugly!

So on behalf of the birds (and maybe even the 4-legged critters in the park), who cannot attend this Dec 9th meeting I'm lending my voice to let you know I think the birds/animals/wildlife should not have to deal with this proposed tower, planned as it is.

Scale it back. Vote with the critters. They don't talk back.

Yours Sincerely,

Terry Connor
814 Duncan St
94131

Sent from mobile

From:	BP
To:	BOS Legislation, (BOS)
Subject:	Re: SUPPORT-File No. 251094 - Appeal CEQA Class 3 Exemption and File No. C251098 Conditional Authorization Use approval at 350 Amber Dr Project
Date:	Saturday, November 29, 2025 11:04:12 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors,

I live in Diamond Heights with my spouse, Betty Peskin, who has written you about her objections to the proposed monopole. Given time constraints and a deadline let me say that I share all of her concerns plus another I'll outline below:

I am in Christopher Park (doing tai chi weekly), walking in that park several times a week, and the same goes for Glen Park Canyon. I'm a frequent user. I wanted us to move up here from Noe Valley three decades ago primarily because of access to green space and the **spectacular** Glen Canyon Park.

Recently I completed the crosstown trail through Glen Park Canyon to inaugurate my 79th year. IMHO it was the highlight of the trail. I'm keenly interested in wildlife, especially birdlife. I sit in the Canyon to draw frequently as this is not a pastime but a passion. I've been a working artist for decades, so watching/drawing the birdlife in both parks has been a constant highlight of life in Diamond Heights.

I recognize there may not (yet) be hard science to support that owls and other birds do not "like" these poles that emit signals. I'm not a bird, so I can only imagine.

But as a very frequent hiker and user of these trails I can guarantee you that this pole **will** destroy the view as we hikers walk up the trail and while in Christopher Park. It's going to be put bluntly, plain ugly!

So on behalf of the birds (and maybe even the 4-legged critters in the park), who cannot attend this Dec 9th meeting I'm lending my voice to let you know I think the birds/animals/wildlife should not have to deal with this proposed tower, planned as it is.

Scale it back. Vote with the critters. They don't talk back.

Yours Sincerely,

Terry Connor
814 Duncan St
94131

Sent from mobile

From: BP
To: BOS-Legislative, (BOS)
Subject: Re: SUPPORT-File No. 251094 - Appeal CEQA Class 3 Exemption and File No. C251068 Conditional Authorization Use approval at 350 Amber Dr Project
Date: Saturday, November 29, 2025 10:52:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Members of the Board of Supervisors:

I am a resident in district 8 and am on the Board of the Diamond Heights Community Association (DHCA). I'm writing you in my dual capacity as so many of my neighbors feel strongly about this but were not able to get letters out in a timely manner due to our appeal being accepted on short notice, just a few days ago, and their travel plans and/or Thanksgiving plans that made it challenging for them to meet the deadline required to have our letters distributed in your packets.

The proposed monopole is outsized— way too large at a location that is built on landfill, and next to a recreational park where plenty of kids are around daily, and at the edge of one of the most beautiful parks in S.F. It does NOT belong here as planned!

I'm against it because of legitimate environmental concerns: It's going to be built on landfill. It's a potential fire hazard, and the health and safety concerns are numerous and have been outlined in the presentation our neighbors have made known to our Supervisor, and at the Planning Commission hearing of Sept 25th.

At that hearing we lost by one vote. It was a nail biter. You could see that the commissioners were having a tough time deciding how to vote on this.

We believe AT&T can accomplish their goals to improve coverage by scaling this project way back, and/or finding alternative locations that will achieve their goals without the risks that this construction of a monopole will pose at a height of 20 feet above the tree-line, at the edge of both Christopher Park and Glen Park Canyonz

If built as ATT proposes, this behemoth of a tower would be the largest free standing one in any residential area in the City.

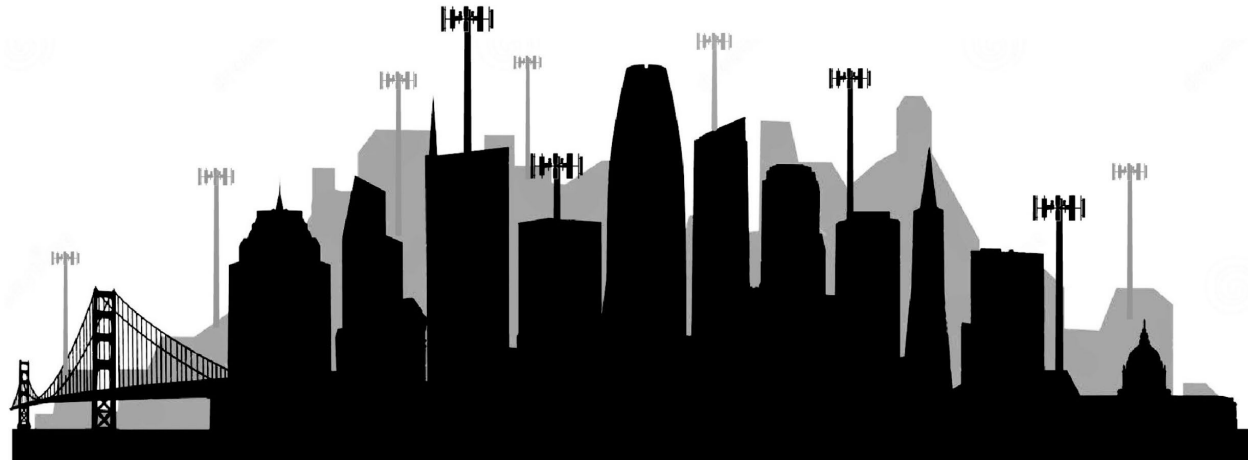
We're not against this technology and know that signals can be improved without putting this monopole up as is.

This is a huge cash-cow for AT&T, who will undoubtedly sublease the pole to other carriers with no permits needed once it's constructed, so that the monopole **will be even more of an eyesore** than we see in their renderings.

Further we believe this project does not meet the criteria of "necessary," as we have checked with the S.F. Police and Firefighters and have learned that First Net is not the method of communication they use to communicate or rely upon.

Allowing this "exemption" sets a precedent for all S.F. neighborhoods. We must keep in mind that the beauty of our Fair City is unique, and it's what makes us a world-class City. There should be no rush to approve this project as is.

There are NO free-standing towers of this height or bulk in residential neighborhoods or next to parks in the City. Do we want to be branded like this in the future?



chandawilliamsdesign.com

Massive structures like this do not belong in landslide and fire zones, adjacent to parks, playgrounds, and homes.

Safety must be the priority of the Board of Supervisors and with the technology that's coming at us so fast we barely have time to catch our breath and seriously consider the long-term consequences of what's at stake

Sincerely,

Betty Peskin
814 Duncan St
94131

Sent from mobile

From:	Terence Groeper
To:	BOS Legislation, (BOS)
Subject:	AT&T Monopole at 350 Amber Dr -- My continued opposition to this unnecessary and undesirable AT&T boondoggle!
Date:	Saturday, November 29, 2025 9:08:52 PM
Attachments:	2025.06.21 T.Groeper Monopole Oposition Letter 2a.pdf

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Supervisors,

Please find my attached comments which were made to the Planning Commission before the Sept 25 meeting and unacknowledged by four of the Commissioners at the Sept 25 hearing (the vote was 4:3). They are still relevant and important reasons why the approval of this massive antenna structure must be overturned. An antenna of this size (10 stories) in a neighborhood zoned for four stories, belongs in a commercial or industrial area NOT in a residential neighborhood. This would be the only antenna over 100 feet tall in a residential neighborhood, the 2 existing antennas are in commercial areas. Other tall (but not reaching 100') antennas are near freeways, BART stations, or attached to tall buildings and NOT adjacent to parks.

This huge electric structure which will be 20' above the tree line, is not "necessary" there are alternative locations and less intrusive antenna systems and alternative ways to boost "FIRST NET" (for First Responders) – which was the reason 4 of the Planning Commissioners cited as their excuse to approve the structure. For the record: Police and Fire do not require First Responders to use FIRST NET, the Commissioners were misled by AT&T. AT&T wants this massive structure to increase their market share AND to likely add antennas and a second layer of ugly antennas to other carriers on this structure – they recently stated they would not rule out adding more antennas (making the structure heavier, more bulky and greater risk for landslides and fire in our windy neighborhood).

It is not "desirable" from a safety perspective, it is a major fire risk in an Wildfire/Wildland Urban Interface Area and is an area identified on the SF Landslide-Seismic hazard map. It will change the character of the neighborhood known for its open skies, nature and views of the playground and canyon. The danger of fire and exposure to Radio Frequency Radiation is not desirable for the wildlife in the canyon, flora and birds and insects and according to the 1996 Telecommunications Act RFR standards are not considered under the definition of "environment" the way humans are, in fact RFR affects avian life at a much lower frequency than humans not to mention antenna collisions to a massive tower built in the middle of a forest.

Undoubtedly this is desirable for AT&T to build their corporate coffers, but it is NOT desirable at the expense of residents in a neighborhood whose parks and nature bring us together.

Sincerely,

Terence Groeper, 970 Duncan Street, 307F, San Francisco, CA 94131
The clear calm voice for honesty, openness, good governance and fiscal responsibility.

"Good judgment comes from experience and experience comes from bad judgment." -- Fred Brooks

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Terence Groeper
970 Duncan Street
#307 F
San Francisco, CA 94131

June 21, 2025

San Francisco Planning Department
49 S Van Ness Avenue, Suite 1400
San Francisco, CA 94103

RE: Proposed 104-foot Monopole at 350 Amber Drive, San Francisco, CA 94131

Dear Commission Members,

Please be informed that I am expressing my opposition to the installation of an unsightly, 104-foot monopole in the Diamond Heights neighborhood, specifically in the Glen Canyon area of the San Francisco Police Academy at 350 Amber Drive.

This monstrosity, with nine antennas, will distract from the beautiful views in one of the most attractive neighborhoods in San Francisco, a neighborhood that is very welcoming to families, friends, neighbors, and tourists alike. In fact, it is one of the last open spaces in San Francisco. Our pristine neighborhood includes the spectacular Glen Canyon, with its abundant wildlife and hiking trails, the Christopher Playground, the Dog Park, and the Red Robin Community Garden. The proposed monopole would be seen from just about any spot in the neighborhood. It would thus negatively alter the prized visual landscape and vastly bring down the property value of our biggest financial asset, our places of residence. This is unacceptable.

Finally, a grassy canyon and tall trees surround the site of the proposed monopole. Combined with the high winds and the probability of an earthquake in the area, disaster would strike if the pole toppled or the antennas came loose, sparking a wildfire in the tinder dry canyon and trees.

For all of the aforementioned reasons, I urge you to reject the construction of the monopole in our lovely neighborhood. Thank you for your time and consideration.

Sincerely,



Terence Groeper.

From: Rheanna Bates
To: BOS Legislation, (BOS)
Subject: File No. C251098 – Appeal: Conditional Authorization Use approval at 350 Amber Dr Project
Date: Saturday, November 29, 2025 7:41:22 PM
Attachments: SF Planning Commission.docx

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Supervisors,

Attached are the comments that I made to the Planning Commission before the Sept 25 meeting. My concerns are still relevant and important reasons why the approval of this massive antenna structure must be overturned. An antenna of this size (10 stories) in a neighborhood zoned for four stories belongs in a commercial or industrial area NOT in a residential neighborhood. This would be the only antenna over 100 feet tall in a residential neighborhood; in fact, the 2 existing antennas of this size in San Francisco are in commercial areas. Other tall (but not reaching 100') antennas are near freeways, BART stations, or attached to tall buildings and NOT adjacent to parks.

This huge electric structure, which will be 20' above the tree line, is not **"necessary"** there ***are*** **alternative locations and *less intrusive* antenna systems** *and* alternative ways to boost "FIRST NET" (for First Responders) – which was the reason 4 of the Planning Commissioners cited as their excuse to approve the structure. For the record, Police and Fire do not require First Responders to use FIRST NET, so the Commissioners were misled by AT&T. AT&T wants this massive structure to increase their market share AND to likely add antennas and a second layer of ugly antennas to other carriers on this structure. They recently stated they would not rule out adding more antennas to this structure, making the structure heavier, more bulky and at greater risk of causing landslides and fires in our windy neighborhood.

This 100-foot-plus tower is not **"desirable"** from a safety perspective since it would cause a major fire risk in an Wildfire/Wildland Urban Interface Area and would be located in an area identified on the SF Landslide-Seismic hazard map. It will change the character of the neighborhood, known for its open skies, nature, and views of the playground and canyon. The danger of fire and exposure to Radio Frequency Radiation is not desirable for the wildlife in the canyon, flora and birds and insects. According to the 1996 Telecommunications Act, RFR affects avian life at a much lower frequency than humans, not to mention would cause deaths through antenna collisions with a massive tower built in the middle of a forest.

Undoubtedly, building this 100-foot monopole is *desirable* for AT&T to build their corporate coffers, but it is **NOT** desirable at the expense of residents in a neighborhood whose parks and nature bring us together.

Best,

Rheanna Bates
255 Red Rock Way, San Francisco

SF Planning Commission
% Chair Lydia So and Members: Moore, Braun, Campbell, Imperial, McGarry, and Williams
And Commission Executive Director and Secretary
49 S. Van Ness Ave.
San Francisco, CA 94103

July 14, 2025

Dear SF Planning Commission,

I am writing to oppose AT&T's plan to build a Macro Tower in Diamond Heights on the grounds of both neighborhood safety and aesthetics. My first concern is neighborhood safety, as the plan calls for installing a diesel fuel tank and generator in a grove of highly flammable eucalyptus trees. Also, these trees often lose branches in high wind gusts, which happens nearly every week in this very windy neighborhood, and would create a constant high fire risk for the Diamond Heighs neighborhood as branches would regularly hit this Macro Tower. Since wireless antennas have been linked to fires in high-wind situations in California, it is very irresponsible to propose installing this wireless antenna with a generator in an area that already has a high fire risk. There is no upside to increasing the fire risk for residents in this neighborhood, especially since we will see no monetary benefit from this Macro Tower that will help us afford our ever-increasing home insurance premiums and will receive no compensation if/when AT&T's proposed Macro Tower causes a fire.

Diamond Heights is a scenic area of San Francisco that many of us live in for its beautiful views of Mt. Washington, Mt. Sutro, Glen Park, and the city, and this proposed Macro Tower will destroy the views from Duncan, Amber, and Turquoise Streets and decreased our property values. As I live in Diamond Heights and my view faces Duncan St., I am one of many who has no wish to look out of my window to see this Macro Tower blight my view everyday. Research published by the national association of realtors documented that property values decrease when Macro Towers are located near homes or neighborhood parks or block vistas, so my property value would be affected. What compensation is AT&T proposing for blocking our views and decreasing our property value? None. Again, AT&T's Macro Tower would blight the views of most of us living in the Diamond Heights neighborhood and anyone who enjoys Christopher Park or Glen Canyon Park. There is no benefit to residents and instead, significant downside to our neighborhood's safety and charm.

Please vote no on AT&T's plan to put the Diamond Heights neighborhood's safety at risk and ruin our neighborhood's beautiful views and aesthetics. A corporation's self-interest should not be prioritized over hundreds of San Franciscans' safety and quality of life.

Best,

Rheanna Bates
255 Red Rock Way

San Francisco



From:	Betsy Eddy
To:	BOS Legislation, (BOS); lisa.somera@sfgov.org
Subject:	Fwd: Letter to overturn Planning approval of cell phone at 350 Amber Drive
Date:	Wednesday, November 26, 2025 12:22:45 PM
Attachments:	Appeal Request to Mandelman 11-26-25 .docx Susan Foster 10-23-25.pdf Susan Foster letter on fire risk to SF Planning 7-14-25.pdf Evelyn Rose Response_ATT_Monotower_DiamondHeights_ERose_12July2025.pdf Geotechnical Investagation for SFUSD 1999.pdf landslide map Blue dot location of ATT proposed MACRO Tower SF Seismic Hazard Map (1).docx

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Hi BOS Legislative Staff,

I had trouble emailing my letter to Board President Mandelman for the 350 Amber CEQA. Please see the forwarded message that I sent at 11:46. I hope this info still meets the due time.

2 more attachments are below.

Thank you,

Betsy Eddy
415-867-5774

---------- Forwarded message ---------
From: **Betsy Eddy** <betsy.eddy@gmail.com>
Date: Wed, Nov 26, 2025 at 11:46 AM
Subject: Letter to overturn Planning approval of cell phone at 350 Amber Drive
To: Rafael Mandelman <rafael.mandelman@sfgov.org>, Mandelman Staff <mandelmanstaff@sfgov.org>, <BoSlegislation@sfgov.org>

Hi Supervisor Mandelman and Board of Supervisors Legislation Staff

Please find attached a letter listing reasons that Planning Commission approval of a 10-Story monopole on Police Academy must be overturned for safety issues.

More attachments will be forwarded

Respectfully,

Betsy Eddy
Former Diamond Heights Community Association President

Betsy Eddy
14 Farnum Street
San Francisco, CA 94131

Board President Rafael Mandelman
Board of Supervisors
San Francisco City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

November 26, 2025

RE: Request to Overturn SF Planning Approval of CEQA and CUA **2024-004318SHD 350 Amber Drive**

Dear Board President Mandelman,

As President of the Board of Supervisors, it is vital that you vote to overturn Planning's approval of CEQA and CUA at the Planning hearing on September 25, 2025. You know well our concerns that AT&T proposes to build the 10-story monopole on unstable land next to a seismic landslide zone in an earthquake. The cell phone tower would detract from the natural beauty and views from our hilltop Diamond Heights. See photo of a similar monopole.

Though you are concerned that AT&T would sue the City if their permit is denied, two attorneys have told us that if AT&T would sue, that AT&T would not be awarded damages and the only repercussion would be that AT&T would receive the permit. The City would probably have to pay attorneys' fees.

The SF Planning Commission voted 4-3 to approve the AT&T macro tower on 9-25-25. Approval by 4 Commissioners centered on AT&T staff saying, that FirstNet - an AT&T product, was needed for first responders in emergencies. A letter from Sheriff Miyamoto was texted to President Linda So supporting the approval because of the need for FirstNet just as the Commissioners were in discussion before voting. At our Diamond Heights Community Association (DHCA) meeting on 10-15-25, Fire Chief Crispen and SFPD Capt. Gerald Newbeck stated that FirstNet was not mandated by the SFFD and SFPD though some firefighters and police officers had it on their phones. They also said that 911 calls from anywhere in Diamond Heights from any cell phone company would reach 911 Dispatch.

You understand the fire dangers that residents in Diamond Heights watch for everyday in our fire prone, windy neighborhood. In 2018 you convened a Town Hall on *Fire Danger in our*

Neighborhood Parks. Following a fire in June 2021 caused by fireworks that spread to a backyard in Diamond Heights, not far from the Police Academy, Lt. Jonathan Baxter, SFFD Information Officer, is quoted in an ABC News video saying, “The whole neighborhood could have burned down. That is the reality!”

Another important issue is that the FCC is currently requesting comments on legislation that basically states that any telecom company can place cell phone antennas most anywhere they want. I do not think San Francisco would want 10-story cell phone antennas all over residential areas. The proposed macro tower would be within 300’ of residences, 20’ of two parks, two-day care centers and the Diamond Heights Shopping Center.

Just last week, I learned that the SF General Plan calls for the Police Academy to move to another location. Would the property be resellable with a 10-story cell phone tower on it? If the property is left vacant, who would monitor for fires ignited in the telecom equipment and for vandalism? The monopole, though within 20 feet of George Christopher Playground and Glen Canyon Park, would be blocked off from public view by the Police Academy buildings and trees surrounding the back parking lot. Vacant property around the monopole would be a safety hazard and fire risk.

Public Safety and Environmental Risks

- There is slippage danger due to 60-90’ of fill under the proposed site. 2 million cubic yards of dirt and rock were leveled off from the tops of Gold Mine Hill and Red Rock Hill to make a flat area for the Diamond Heights Shopping Center, George Christopher Playground, and the Police Academy. See Geotechnical Study 1999, page 5 and Evelyn Rose letter dated 7-12-25. AT&T has not explained the underpinning of a 104’ monopole that could weigh up 10 tons.
- The Diamond Heights Elementary school was closed in 1976 due to soil slippage and potential collapse in an earthquake.
- The location is directly adjacent to a landslide hazard in an earthquake. See SF Seismic Hazards Zones Map - https://data.sfgov.org/-/San-Francisco-Seismic-Hazard-Zones/7ahv-68ap. A view of the landslide hazard is attached.
- In Fall 2024, SF Rec and Park replaced a collapsing retaining wall on a trail directly below the planned site at the cost of $200,000. We think ground water seepage contributed to the damage to the wall.
- According to the attached Geotechnical Study, “The degree of water saturation in the fill was 60 per cent in 1960-61 but has now grown to over 90 per cent...The increased moisture changes the density of the fill causing it to consolidate because of the extra weight of the water." (page 5)
- According to an arborist, deep digging to install the monopole will likely kill roots of nearby trees further destabilizing the ground under the site.

Fire Risk

- 190-gallon diesel fuel tank for backup generation could be damaged in an earthquake or fire. Required testing would contaminate the air and soil with dangerous toxins.

- Site is in a high wind area among many older trees including nearby eucalyptus trees that could spread sparks quickly as in the Oakland Hills fire in 1991 that trapped and killed 25 people. Combustible eucalyptus trees spread the fire and increased the intensity of the fire heat.
- If a fire starts in the equipment, PG&E would have to turn off the electricity and appear on site to confirm that the grid was off. Then the tower would have to deactivate for up to an hour before firefighters could start fighting the fire in the telecom equipment. See Susan Foster letter 10-23-25.
- A fire could quickly spread to the Canyon, to the many homes adjacent and to the George Christopher Playground. Evacuation on a weekday when up to 4 preschools are present would be challenging, chaotic, and disastrous.
- 4 large fires in southern CA, started in telecom facilities. One of the fires, the Woolsey Fire, killed 3 people and caused $6B in property damage. See Susan Foster letter 7-14-25.

Approving a massive structure 20 feet above the tree line (which will allow AT&T to load even more antennas) in a small residential neighborhood that is unique for its views, closeness to nature, and open space, sends a message that SF appointed and elected officials are more concerned about prioritizing corporate interests over long-time residents and homeowners safety and well-being.

Please help us stop the 10-story cell phone tower by voting to overturn the Planning Commissioners' approval in order to protect our neighborhood safety.

Grateful for your service to Diamond Heights and San Francisco.

Betsy Eddy

Former DHCA President
Coordinator for Resilient Diamond Heights
Coordinator for the Diamond Heights Blvd. Median Project

SUSAN FOSTER
PO BOX 1444
LYONS, CO 80540

October 23, 2025

Dear President Rafael Mandelman and Honorable Supervisors:

Re: Conditional Use Permit and CEQA exemption appeals for ATT Macro Tower at 350 Amber Drive SF CA 94131

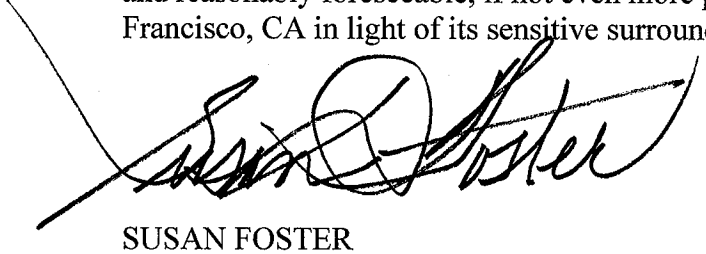
1) I, Susan Foster, am an Honorary Firefighter with the San Diego Fire Department. I have worked with firefighters in California and across the country for more than two decades. I worked with Tony Simmons, PE, a professional electrical engineer licensed in the states of Nevada and California, as well as attorney W. Scott McCollough. The three of us were hired to create a Fire Safety Protocol for telecommunications equipment in Malibu, California following two telecom equipment-initiated fires causing damages of over $6 billion between the 2007 Malibu Canyon Fire and the 2018 Woolsey Fire.

2) I confirm that a wireless facility may cause electrical fires which are very difficult to extinguish using conventional means. Firefighters do not typically fight fires on energized electrical equipment with water because of the severe risk of electrocution. The grid must be cut first, a process that can take up to one hour. Firefighters can only stand by and protect the perimeter until a utility representative appears on scene to confirm the power has been cut.

2) I confirm that the 104' wireless facility proposed at 350 Amber Drive next to a grove of 90-feet eucalyptus trees, Glen Canyon Park, a children's playground, and other residential places, presents a significant fire hazard that would be extraordinarily challenging, if not impossible, to extinguish, and which may endanger life, safety, and destroy properties nearby.

3) I authored the November 17, 2022, LA County White Paper and co-authored the Malibu White Paper, February 16, 2022, with Tony Simmons, PE. I stand by and concur with opinions regarding the fire hazards caused by wireless facilities that are detailed in these papers.

4) I believe that the same fire risks and hazards described in the Malibu and LA County White Papers authored by myself and subject matter expert Tony Simmons, PE are equally applicable and reasonably foreseeable, if not even more probable, at the 350 Amber Dr. location in San Francisco, CA in light of its sensitive surroundings and the adjacent grove of eucalyptus trees.



SUSAN FOSTER
Honorary Firefighter SDFD

Susan Foster

PO Box 1444
Lyons, CO 80540
susan.foster04@gmail.com
(858) 756-3532

July 14, 2025

To: San Francisco Planning Commissioners
49 South Van Ness Avenue, San Francisco, CA 95103

Chair So, Vice-Chair Moore, & Commissioners Braun, Williams, Campbell, Imperial, McGarry:
Cc: Commission Exec. Director, Commission Secretary, John Darcey Planner, Department of Recreation

RE: OPPOSE: ATT *proposed telecommunication facility at 350 Amber Drive in Diamond Heights Neighborhood*

I am a Fire and Utility Consultant, an Honorary Firefighter with the San Diego Fire Department, and I have worked with attorneys on telecommunications ordinances including fire prevention from 2001 to the present. Most recently, the unanimously passed Malibu Resolution 21-17 for macro towers on private property included our Fire Safety Protocol for all macro towers coming into Malibu. The City Council applied this to small cells, as well. I was the co-author with electrical engineer Tony Simmons, PE of the Fire Safety Protocol. We require all applicants submit eight electrical engineering design plans signed and sealed by a telecommunications electrical engineer guaranteeing their safety. This is the only city in the country that has this requirement.

Why was our team brought in? This is the city that has burned twice at the hands of telecom. In 2007 the Malibu Canyon Fire was caused by multiple carriers, including AT&T, overloading Southern California Edison utility poles. Three poles snapped in the Santa Ana winds and ignited the grass below. In 2018, the Woolsey Fire was started, in whole or in part, by electrical equipment belonging to a small telecommunications company that was incorporated into Southern California Edison.

In May 2018 a telecommunications inspector noticed some of the telecommunications equipment was broken and had lost its ground. The telecommunications inspector failed to mark this repair as urgent. In November 2018 this equipment, still in dangerous disrepair, was a significant part of the 2-part ignition source that caused the Woolsey Fire. Combined those fires caused over $6 billion in damages. Some burn scars from homes that were destroyed remain to this day.

I'm sure you are aware that the Palisades Fire destroyed one-third of Malibu in January. Even though the Palisades Fire was not telecommunications-related, it's destruction on the heels of two devastating fires heightens the vulnerability faced by the whole of California.

Macro towers do pose a fire risk. These fires can be due to deficient structural engineering or electrical engineering. Many of these fires are covered up by the telecommunications industry. I have worked with the firefighters of California for over two decades. I am aware that firefighting equipment worth millions of dollars is sometimes gifted to stations that do not submit fire incident reports on macro tower fires. No government agency is keeping track of these fires and some within the telecommunications industry do their best to cover them up.

When the carrier reads my letter, they will know exactly what I am referring to.

You have heard for years now that cell towers cannot be denied placement based on health concerns. However, what you may be unaware of based on self-serving advice from industry-leaning attorneys/consultants, is that safety <u>is</u> yours to regulate. Safety also means taking great care to ensure electrical and structural engineering rigor with respect to cell towers.

Safety is taking care to have appropriate setbacks from property and densely populated buildings like schools, neighborhoods, daycare centers and highly flammable parks. People need time to escape from a cell tower fire. Every cell tower is an electrical device, and every electrical device is going to fail. One of the likely consequences of electrical failure is fire. When a cell tower catches on fire, it cannot be extinguished through conventional means. Anyone putting water on a fire before the grid has been cut may be electrocuted. Cutting the grid can take between 30 and 60 minutes.

AT&T carries the FirstNET signal, FirstNET is for emergency services communication. All cell towers carrying emergency services communication must adhere to APCO ANSI 2.106.1–2019. This requirement consists of 15-pages of structural engineering requirements for site hardening for any structure that is going to convey emergency services communication. That is required by the federal government.

It is my understanding that the proposed AT&T site for this macro tower is on landfill. From a structural engineering point of view this does not make sense. In fact, it is a dangerous location.

It is also my understanding that the proposed site is adjacent to a park with abundant, flammable grass and it is surrounded by eucalyptus trees. From a fire perspective, I cannot think of a worse location. Eucalyptus trees are highly flammable and when they burn, they literally explode. Under Santa Ana or El Diablo conditions those embers may be carried for 2 – 3 miles. With low humidity and abundant dry fuel, a wind event would enable embers to ignite new fires miles ahead of the main fire front.

I would also point out that in the immediate and nearby neighborhoods which includes a children's playground, a veterinary hospital, a daycare/nursery, the police academy, a drugstore and countless homes, many would have an extremely difficult time exiting the neighborhood(s) if this macro tower catches on fire. Multiple neighbors with the close by, some within 500 feet.

Additionally, an electrical fire can take the temperature inside a macro tower to 4000° in less than a second. Temperatures of an arc flash inside the tower can reach as much is 35,000 °F. This is three times the estimated temperature of the sun's surface.

I will give you an example of what can happen to a macro tower when there is an electrical fire inside the cell tower. In March 2021, a Chula Vista, California fire was caused by an AT&T cell tower that was partially concealed in a light fixture around a track at Otay Ranch High School. The tower burst into flames at 7:30 PM on a Tuesday evening. The Fire Incident Report was obtained through a CPRA request. The area of origin was within the equipment; the heat source was "electrical arcing." When the fire department arrived, the 100-ft pole appeared to have an internal fire that traveled up the pole to the cell phone equipment and stadium lighting at the top of the pole. Firefighters maintained a safe distance until they could verify all power supply to the pole had been secured. As they were waiting for the representative from SDG&E to arrive to confirm the power had been cut, the heat of the fire due to arcing caused the steel pole to become molten plasma. It collapsed onto the bleachers near the football field, burning the track, and destroying the bleachers.

Because the grid must be cut before a cell tower fire can be extinguished through conventional means, a fire from this proposed cell tower fight could literally consume the adjacent neighborhood and the above-named vulnerable populations before people have a chance to evacuate. Safety must be your primary concern.

The FCC has repeatedly stated that safety belongs to the municipalities to regulate. *In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting; 2012 Biennial Review of Telecommunications Regulations*, 29 FCC Rcd 12865, 12945, ¶188 (2014)

After scrutinizing engineering designs on applications coming into the cities where we have worked, our team engineer determined approximately 80% of the engineering designs for macro towers and small cells were deficient.

Our team working in Malibu – W. Scott McCollough, former Texas Assistant Attorney General for Telecommunications & Utilities, engineer Tony Simmons, P.E., and I, after extensive research, linked four major fires to telecommunications equipment within the last 15 years in Southern California alone, costing well over $6 billion in damages. In brief these fires are:

- Guejito Fire (2007) in San Diego which merged into the explosive Witch Creek Fire.
- Malibu Canyon Fire (2007).
- Woolsey Fire in Malibu & LA County (2018) which burned for one month, took the lives of three people trying to escape.
- Silverado Fire in Irvine (2020).

It is particularly germane to note that in the Malibu Canyon Fire, AT&T was directly involved in the initiation of this 2007 fire. The California Public Utilities Commission (CPUC) accused all parties the CPUC found to be negligent in the initiation of the Malibu Canyon Fire to have impeded the fire investigation.

These parties included: Southern California Edison (SCE), AT&T, Verizon, Sprint (now T-Mobile) and NextG, now owned by Crown Castle. Because AT&T, Verizon and Sprint admitted to their participation in the initiation of the fire without having to litigate, the CPUC and the Safety and Enforcement Division (SED) were more critical of and punitive with SCE and NextG.[1]

It should be of great significance to the San Francisco Planning Commission that the CPUC accused all parties – including AT&T – in the Malibu Canyon Fire of failing to cooperate fully in the fire investigation. If the parties are negligent in the first place, and fail to cooperate in or purposely impede the fire investigation, how can they be trusted with respect to fire safety going forward?

We are supposed to learn from mistakes whether it be structural overloading which falls under the umbrella of civil engineering, or an electrical design flaw which falls under electrical engineering. If mistakes are corrected, there is a greater level of trust for that party going forward. When the California Public Utilities Commission accuses all parties including AT&T of impeding the investigation, from a fire safety vantage point, trust is lost.

Please find two attachments. One is an aerial view of the proposed tower location, and another is titled "Monopole location". Both assisted me in making the best fire safety assessment with routes of egress in mind, and the nearby population in mind, as well. One of the most difficult evacuations involves young children. Please keep this vulnerable population at the top of your safety priority list as you make your critical decision.

Cell towers do cause fires, and I cannot emphasize enough how dangerous it is in this location surrounded by eucalyptus trees with a foliage filled canyon on one side and a cluster of densely populated areas on the other. Fires do occur when towers collapse for structural insecurity, and a cell tower of this height with the required ancillary equipment may present significant structural challenges in the future because they would be built on landfill. I do not know if the site could pass the required APCO ANSI 2.106.1–2019 protocol. The carrier may not have told you about this protocol, but the federal government requires it.

Respectfully submitted for the record,

SUSAN FOSTER
Honorary Firefighter SDFD
Fire & Utility Consultant

Attachments (2)

[1] DECISION CONDITIONALLY APPROVING THE SOUTHERN CALIFORNIA EDISON COMPANY SETTLEMENT AGREEMENT REGARDING THE MALIBU CANYON FIRE, BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA, Decision 13-09-028 September 19, 2013.



July 12, 2025

To: The San Francisco Planning Commission, commissions.secretary@sfgov.org

Cc: John Dacey, San Francisco Planning Department, john.dacey@sfgov.org
Rafael Mandelman, President, San Francisco Board of Supervisors, mandelmanstaff@sfgov.org

Re: 350 Amber Drive, San Francisco, CA (7521/005)
Record Number: 2024-004318CUASHD
For the Planning Commission Conditional Use Authorization Hearing, July 24, 2025

Dear Honorable Commissioners,

The site in Diamond Heights selected for AT&T's 10-story-tall macro wireless tower is on unstable ground – *literally*. The entire project should be red tagged now, before construction begins because it does not appear that AT&T has performed the necessary due diligence.

At a minimum, a 10-story tower in an intentionally designed low-profile neighborhood with zoning that does not exceed 4 stories is antithetical to the Modernist architectural integrity of the Diamond Heights community. And for AT&T to have held only one community meeting – 15 months ago – is hardly sufficient. Additional community meetings should have been held to ensure that the entire community was made aware of the project in a timely fashion and could make their voices heard.

Moreover, has the San Francisco Fire Department reviewed placement of a nearly 200-gallon tank of diesel fuel within a grove of highly flammable eucalyptus trees? If not, they should.

In addition, AT&T makes no statement about the noise pollution that could be created on a nearly continuous basis, given the frequency of high winds that will be blowing around the large, multiple components attached to the tower. Diamond Heights, like most of San Francisco, is *very windy*, with frequent gusts often averaging about 35+ mph. In fact, according to a recent report in the San Francisco Chronicle, the months of May and June have grown "*measurably windier across the Bay Area*" over the past decade.[2] With climate change already underway, these numbers will likely continue to increase in intensity and frequency. Winds blowing around the macro wireless tower could certainly negatively impact the natural soundscape of Diamond Heights.

However, my primary concern is the short- and long-term safety of this ill-conceived placement. AT&T is proposing to build their 10-story-tall tower on landfill that is known for slippage.

The map on page 1 of the AT&T document identified as the *Plans for 350 Amber Drive* incorrectly marks the flat area of landfill supporting Christopher Park as Gold Mine Hill.[3] While Gold Mine Hill is solid bedrock, it does not begin until beyond the southern border of Christopher Park, on the opposite side of the park from the Police Academy. The proposed macro wireless tower is on *landfill*, not Gold Mine Hill.

The San Francisco Police Academy at 350 Amber Drive is currently located in buildings originally constructed for Diamond Heights Elementary School. On June 16, 1976, the San Francisco Examiner reported,[4]

> *"Schools Supt. Robert Alioto said today he will ask the school board to close nine year old Diamond Heights Elementary School immediately because it is sinking and sliding down the hill. Soil engineers say the landfill under the school is subsiding by 1-1/2 inches per year and is moving*



horizontally at a rate of 3 inches per year. George Hervert, a geotechnical engineer, speculated that groundwater from the surrounding hills, may be responsible for the slide. The San Francisco Redevelopment Agency originally graded and filled the site in 1964." [Also see Attachment A]

In fact, 2 million cubic yards of dirt and rock had been removed from the tops of Gold Mine Hill to the south and Red Rock Hill to the north to regrade the saddle between the hills and to infill decommissioned rock quarries (as shown in this aerial view, taken August 15, 1960, San Francisco Public Library). Filling in the saddle that dipped between Gold Mine and Red Rock Hills created the large flat area for the development of a "*Neighborhood Center*," including the shopping center and Diamond Heights Elementary School.[5,6]

Cracks started developing in the new school building, completed in 1966, within three years of its construction when it was first noted "*to be sinking*."[7] As many as 500 students needed to be urgently redistributed to other schools across the city because the building *"might not be safe in an earthquake."*[8,9]

Engineers explained that the sinking and sliding of the landfill was due to increased water moisture in the soil.[10] *"The degree of water saturation in the fill was 60 per cent in 1960-61, but has now grown to over 90 per cent…The increased moisture changes the density of the fill causing it to consolidate because of the extra weight of the water. And that, in turn, causes whatever is built on it to sink and slide."*[10]

The release of underground water via aquifers, especially during heavy winter rains, has continued to plague the infill and adjacent hillside and retaining wall descending into Glen Canyon well into the 21st century (as shown here), with trail repair and rerouting required as recently as the past 10 years (see Community Workshop 3, Priority Map, San Francisco Recreation and Parks, September 2013).

It was determined in 1976 that the two-story (south) wing of the school was no longer safe for occupancy and could no longer be used.[10,11] However, the one-story wing had stopped sinking and it was decided it could be used safely. In 1985, the San Francisco Board of Supervisors agreed to purchase the vacated elementary school and convert the single-story wing into the Police Academy.[9,12]

AT&T states that it plans to construct the macro wireless tower immediately south and adjacent to the two-story south building of the former Diamond Heights Elementary School. In the plans provided, and despite showing the foundation in their drawings, AT&T is completely silent on how the 104-foot-tall tower will be anchored into the ground, how the foundation will be constructed, and how deep into the ground it will go. There is also no mention of a report describing the geology of the area.

According to Timothy Riddiough, Professor of Real Estate and Urban Land Economics, University of Wisconsin, Madison, a monopole *"…structure is permanently attached to a foundation that is embedded deep into the ground. The weight of a typical monopole foundation is over a quarter-million pounds*."[14] In an additional note, Riddiough states, "*A typical monopole foundation pad measures 26 by 26 by 2.5 feet, or 1,650 cubic feet, not counting the columnar portion of the foundation that is integrated into the pad. Concrete weighs approximately 150 pounds per cubic foot*."[14] Note that Riddiough only discusses the weight for a foundation pad and does not include the thousands of additional pounds attributable to the pole and antenna, surge suppressor, radio units, mounts, and other attachments.

Why has ground installation not been discussed by AT&T? Excavation of deep holes for the concrete foundation and underground power trench will only serve to further destabilize the surrounding landfill. This places the stability of the school structures and adjacent retaining wall into Glen Canyon at risk.



Once constructed, as winds blow and the macro wireless tower vibrates, the landfill may unsettle further over time, destabilizing not only the tower but also the 190-gallon tank of diesel fuel. These effects will be exacerbated by continuous water release from underground aquifers, especially during the rainy season, as well as earthquakes. Should the diesel tank tip over because of instability, it will pollute the eastern wall of Glen Canyon, a designated Significant Natural Resource Area, or it may result in a fire that will endanger local structures.

According to Riddiough, "*Once in place, towers are difficult and expensive to remove.*"[14] Therefore, the only mitigation for the safety hazards highlighted above is to not construct the tower in the first place.

The AT&T plan for Diamond Heights should be rejected, based on the arguments above. If built, the tower and diesel tank could also "*sink and slide*," just like the school buildings to its immediate north.[11] It seems the more logical and safer alternative with 360° unrestricted coverage would be to construct the monotower on the adjacent hills immediately to the north, ie, Twin Peaks, where radio and mobile facilities are already located, constructed on abundant, easily accessible bedrock.

Thank you in advance for your consideration.

Sincerely,

Evelyn Rose, PharmD
Founder, Glen Park Neighborhoods History Project (www.GlenParkHistory.org)
31 Mizpah Street
San Francisco, CA 94131
Email: GlenParkHistory@gmail.com

Enc. (Attachment A)

Sources

1. 350 Amber Drive, RECORD NO. 2024-004318CUA, EXECUTIVE SUMMARY, Conditional Use AUTHORIZATION & SHADOW FINDINGS, pg 5, Section 14A.
2. San Francisco Chronicle. Recent Bay Area winds aren't just strong, they're record-breaking, June 28, 2025.
3. AT&T. Plans for 350 Amber Drive. January 26, 2024.
4. San Francisco Examiner, June 16, 1976, pg 6.
5. San Francisco Planning Department. Diamond Heights Historic Context Statement (Draft), 2016, pg 43 and 68.
6. Simonson H, Modern Diamond Heights, 2017, pg 29.
7. San Francisco Chronicle, January 9, 1969, pg 2.
8. San Francisco Chronicle, June 19, 1976, pg 6.
9. San Francisco Chronicle, August 24, 1977, pg 4.
10. San Francisco Chronicle, June 17, 1976, pg 5.
11. San Francisco Examiner, July 25, 1977, p32.
12. San Francisco Chronicle, June 6, 1985, pg 3.
13. Riddiough T. Wireless Real Estate: Business Model, Real Estate Attributes, and Competitive Market Structure, December 2021, pg 9, 19, 52.

Glen Park Neighborhoods History Project
Glen Park Glen Canyon Park Sunnyside
Fairmount Heights Diamond Heights
San Francisco, California

Attachment A.

City strike finale: 'Clerical errors' and more pay

By Russ Cone
City Affairs Writer

The final acrimonious episode of the 39-day craft worker strike was staged this morning in the chambers of the San Francisco Board of Supervisors.

The strike ended last May 7 with an agreement that a fact-finding committee composed of the mayor, five supervisors and five labor leaders would settle all remaining disputes.

That committee reported in today, after 39 hours of deliberations over a six week period, with something short of unanimity.

Instead of a single report from the joint fact-finding committee, there came a handful.

Two of the reports—one from Mayor Moscone and one from the supervisors' contingent on the panel—seemed likely to produce some modest restoration of the $5.5 million a year in pay cuts which supervisors last March meted out to 1,750 craft workers.

The only justification they could find for any additional pay for the workers was to declare "clerical errors" made in certain job categories.

By correcting these errors they proposed to give slightly more pay than granted in the City's annual wage ordinance to some craft workers.

To do anything but make corrections of "clerical errors" in the already adopted wage ordinance would require declaration of an emergency by the mayor and the board of supervisors.

Separate reports were filed by representatives of the plumbers, machinists and laborers unions to the fact finding committee.

Labor leaders generally denounced the mayor and the supervisors for failing to hammer out a joint report.

"Once again we have been denied the right to a fair hearing," said Joseph O'Sullivan, head of the San Francisco Building Trades Council.

Stanley Smith, head of the Carpenter's Union, called the submission of separate fact finding reports "a flagrant violation" of the agreement which settled the strike.

Plumbers Union leader Joseph Mazola declared that the pay cuts meted out to some craft unions constituted "a super crime in this day and age.

"A lot of you got an awful lot to be guilty of," he angrily told the supervisors.

The "clerical error" wage adjustments recommended by Mayor Moscone and the supervisors on the committee would increase the cost of the wage package by something between a quarter and a half million dollars.

Other clerical errors discovered in the wage ordinance put together by the supervisors' negotiator, Patrick J. Mahler, could bring the total cost of corrections to $2 million.

One such error which led to an underestimation of the wage package was the miscalculation of the work week of 1,170 janitors by two and a half hours each.

There was also a $300,000 undercalculation of the cost of wage raises Mahler negotiated with operating engineers. The agreement with the Teamsters is also going to cost more than expected.

Mahler, who is already receiving more money under a contract with the board than he would be allowed under civil service, is asking the board to "correct" another "clerical error" and thereby raise his salary from $36,000 to $38,000 a year.

Mayor Moscone's fact-finding report recommended some $264,431 worth of "clerical error" pay adjustments.

He advised the board to restore hazard pay for bricklayers and others working in underground construction — operating engineers, glaziers, electricians, plumbers — and for painters, who are often required to work on exterior scaffolds.

He also suggested an increase in the wage level of maintenance machinists and more money for electrical transit mechanics to bring their pay into line with automotive mechanics.

Moscone offered seven recommendations for future dealings with craft unions, noting "both sides have a lot to learn in how to properly manage the integration" of craft unions into the charter wage section governing other city workers.

Supervisors should closely consult with organized labor in preparing a November charter amendment that is supposed to sharply define the term "prevailing wage" and reduce the area of debate in future wage discussions, he said.

The mayor also urged the board to repeal its so-called gag rule ordinance which, during wage negotiations, prohibits the mayor, the board or members of their staffs from discussing wage issues individually with labor leaders.

He asked the Civil Service Commission to draw up more realistic requirements for craft workers and to restudy the so-called benchmarks in regard to wages of power house operators, roofers, tile, and shade and drapery workers."

He also recommended something that his arch opponent, Supervisor John Barbagelata, has recommended in the past—namely that The City phase out some of the craft jobs where it employs only one to a dozen persons and put that work out to private contract.

The supervisors' contingent submitted a report that parallels in many instances Moscone's findings of clerical errors that would provide some additional money for the crafts workers.

But the supervisors concluded that "no facts of sufficient substance were presented" during the 39 hours of fact-finding meetings over the last six weeks "that would warrant a recommendation . . .to revise the salary ordinance."

The supervisors did not calculate the cost of the changes they recommended, but their list of clerical error corrections to be made included:

- An extra $4 a day for truck drivers when they handle raw sewage or dangerous chemicals.
- An extra 75 cents an hour for plumbers when they work underground.
- An extra 20 cents an hour for laborers when working underground.
- An extra $2.50 a day for hod carriers working in live sewage.
- An extra 75 cents an hour for sheet metal workers working from a boson's chair.

The sad and strange slide of Diamond Heights school

By Nancy Dooley
Education Writer

School Supt. Robert Alioto will ask the school board next week to close Diamond Heights Elementary School because it is both sinking and sliding down the hill on which it is built.

Alioto said soil engineers estimate the landfill under the school is subsiding at the rate of one-and-a-half inches a year and is moving horizontally at the rate of three inches a year.

He recommended the closing because of the "unstabilized soil condition and the hazard to the safety of the building and its occupants."

Since the school was built nine years ago, it has settled a total of nine inches.

"The school is both sliding and sinking," Alioto said.

"There is no other alternative but to close the school."

Located at 350 Amber Drive, at the foot of Twin Peaks, the school has 465 fourth-, fifth- and sixth-graders. It has also enrolled about 225 students for summer-school classes.

Alioto said the students will have to go elsewhere, but he does not yet know where.

The 17-classroom school was built on a five-acre section of Red Rock Hill as part of the 325-acre Diamond Heights redevelopment project.

The site was originally graded and filled by the redevelopment agency in 1961, and was purchased by the school district in 1964. Construction, at a cost of $800,000, was completed in July 1967.

Six months later, the central portion of the school settled about five-and-a-half inches.

Associate Supt. Milton Reiterman said teachers almost immediately had trouble opening and closing doors and windows, and some beams had to be repaired.

In 1970, the district spent $15,600 for "cosmetic" repairs when engineers thought the soil subsidence had stopped.

Three years later, however, a two-story classroom wing began to settle, and by last year the school had sunk eight inches.

George Hervert, a soil engineer, thinks an increase in the landfill's moisture content, controlled by the amount of ground water in the surrounding hills, is responsible for the problem.

The moisture content has increased from 60 per cent in 1960 to 90 per cent last year.

Hervert said the main problem is probably at George Christopher Playground, below the school, where the landfill is deepest. When the soil there subsides, it causes the soil beneath the school to sink.

Alioto said he will recommend an immediate investigation so the district can sue the responsible parties. He declined to place the blame anywhere yesterday.

The school, which has cracks in its walls and on the playground, is now worth about $3 million. Alioto called the closing temporary, but said he was unsure whether the school could be shored up or would have to be torn down.

Nearby McAteer High School has not had any sinking or sliding, although a redevelopment agency spokesman said there have been some complaints of settlement and slide conditions elsewhere in the Diamond Heights project besides the elementary school.

He called the soil conditions "a mystery" and said the landfill and construction was done after "advance exploration."

The PTA announced a community meeting to discuss the problem at 7 p.m. tomorrow in the McAteer cafeteria.



CUSTODIAN JOHN CASE CHECKS CRACKS IN WALL
Structure is moving sideways and down at same time

Boy, 9, rescuer drown

A 9-year-old boy and a woman who tried to rescue him drowned yesterday in Shadow Cliffs Park in Pleasanton. The incidents followed another drowning at the park Tuesday.

A spokesman for the East Bay Regional Parks District public-safety department identified the dead boy as Lenair Chess Jr. He was pulled from the water and died at Valley Memorial Hospital.

Carolyn Grier, 36, of Oakland, drowned while trying to save the boy after he fell into the water while fishing.

The drownings occurred in the Arroyo area of the park.

On Tuesday, a 16-year-old boy drowned while swimming in a restricted area.

Muni subway car shorts out in shock test

A circuit breaker in one of three newly-designed rail cars for the San Francisco Municipal Railway malfunctioned during shock tests, causing a trolley wire to melt, it was reported yesterday.

The incident occurred during testing at a federal facility in Pueblo, Colo.

The cars are the first of 100 ordered by the Muni for eventual runs in the Market Street subway.

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DRAFT DRAFT

January 18, 1999

Our Job No. 1393-029

San Francisco Unified School District
Facilities Planning and Construction
1511 Newcomb Avenue
San Francisco, California 94124

Attention: Ms. Elizabeth Lee

Ladies and Gentlemen:

Report
Geotechnical Investigation
Proposed Remodeling and Seismic Upgrade
San Francisco Police Academy
350 Amber Drive
San Francisco, California

This report presents the results of our geotechnical investigation for the proposed remodeling and seismic upgrade of the San Francisco Police Academy located at 350 Amber Drive in San Francisco, California. The subject campus previously housed the Diamond Heights Elementary School.

The campus was built upon a bench on the north side of a filled ravine. The fill material was excavated from nearby hills.

Our report[1] dated May 26, 1998 presents the results of the literature research of the development of the Diamond Heights Elementary School. The initial geotechnical report[2] for the site was prepared by Woodward-Clyde-Sherard and Associates dated January 29, 1965. Woodward-Clyde & Associates prepared a second report[3] dated March 21, 1969 addressing the distressed conditions of the walls and floor slab of the Diamond Heights Elementary School building.

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[1]"Geotechnical Engineering Services, Proposed Remodeling and Seismic Upgrade, San Francisco Police Academy, 350 Amber Drive, San Francisco, California," dated May 26, 1998 (Our Job No. 1393-029).

[2]"Soil Investigation For the Proposed Diamond Heights Elementary School, Project 905, Amber Drive and Duncan Street, San Francisco, California," prepared by Woodward-Clyde-Sherard and Associates, Consulting Soil & Foundation Engineers, dated January 29, 1965.

[3]"Diamond Heights Elementary School, Amber Drive and Duncan Street, San Francisco, California," prepared by Woodward-Clyde & Associates, Consulting Soil Engineers and Geologists, dated March 21, 1969.

Recently, additional geotechnical investigation reports for the site were obtained from a San Francisco Unified School District warehouse. Woodward-Clyde Consultants prepared a third report[4] dated June 7, 1976 addressing settlement in the south wing of Diamond Heights Elementary School. Harding-Lawson Associates prepared a report[5] dated July 15, 1977 addressing the movements at Diamond Heights Elementary School.

PROPOSED CONSTRUCTION

Present plans call for the remodeling and seismic upgrade of the existing buildings at the Academy. This is in preparation for possibly converting the Academy back to an elementary school or maintaining the campus as an administration facility. We understand that shear walls, among others, will be required as part of the retrofit. Details of the loading information are not available at this time. It is also possible that the existing building will be demolished and replaced with appropriate school buildings.

PURPOSE AND SCOPE OF SERVICES

The purpose of our investigation was to explore the subsurface soil conditions in the project area, provide recommendations for foundation support of the proposed shear walls, and provide documentation for the preparation of the Geo-Hazard Statement as required by the Office of Regulation Services of the Division of the State Architect for the subject campus. The investigation was performed substantially in accordance with our proposal dated July 15, 1998.

The scope of our services included a field exploration program of drilling three borings, along with laboratory testing and engineering analyses.

SUMMARY OF SUPPLEMENTARY LITERATURE REVIEW

The Woodward-Clyde Consultants report dated June 7, 1976, indicates that structural repairs were performed on the northerly part of the school building in 1970, and no further distress was observed. San Francisco Unified School District records indicate the masonry wall on the east side of the main entrance was repaired in February of 1970. Distress and deformation of the southerly two-story wing of the building was observed in 1974, and surveys of settlement markers were taken.

Horizontal deformation of the fill of 1 inch in 4 months was recorded below Christopher Park, which is about 25 feet below the school playground level. 8 inches of vertical deformation was recorded at the south end of the building. It was estimated that the settlement would occur at a rate of 1-1/2 inches per year based on the settlement measurements. The average degree of saturation of the fill had increased from 63% in 1964 to 94% in 1975.

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[4]"Diamond Heights Elementary School, Amber Drive and Duncan Street, San Francisco, California," prepared by Woodward-Clyde Consultants, Consulting Engineers, Geologists, and Environmental Scientists, dated June 7, 1976.

[5]"Geotechnical Investigation Relative to Movements of the Diamond Heights Elementary School," prepared by Harding-Lawson Associates, Engineers, Geologists, and Geophysicists, dated July 15, 1977.

It was concluded by Woodward-Clyde Consultants that the entire mass of fill placed to develop Christopher Park and the school property was moving along the original ravine slopes. It was recommended to temporarily discontinue occupancy of the building and continue monitoring the movements and deformation, or continue to occupy the building during monitoring.

Harding Lawson Associates performed an independent geotechnical investigation of the movements of the school building with the results presented in a report dated July 15, 1977.

Harding-Lawson Associates developed seven theories of possible causes for the movement. It was also noted that there was a lapse of 6 years between the period of settlement in 1967, which occurred in the northern portion of the building, and the settlement in 1973, which occurred in the southern portion of the building.

A review of precipitation data indicates a correlation of higher than normal rainfall in 1967 prior to the building settlement and in 1973 prior to settlement in the south wing. It was also noted that the rate of ground water movement was greatest in the area of previous maximum subsidence near the main entranceway.

Field density tests were performed to determine the degree of relative compaction of the existing fill. Compaction ranged from 86 percent to 98 percent, averaging to 92 percent relative compaction.

It was concluded that the cause of the settlement is primarily from the increase in the moisture content of the fill since it was placed, resulting in compression of the fill. Settlement beneath the northern portion of the building was due to groundwater migration. Settlement of the southern portion of the building is due mainly to surface water infiltration, possibly from the construction and irrigation of Christopher Park, which was completed in 1971. The natural soils below the fill were determined to be overconsolidated.

Slight additional settlement of the northern portion of the building was predicted. Continued settlement of the south end of the two-story wing was predicted at a rate of about 1-1/2 to 2 inches per year. A total of 11 inches of settlement of the two-story wing was measured at the time of the report in 1977.

It was concluded that, "The site is stable against a large-scale landslide and continue to be used safely for a school," however, the two-story wing was considered to be potentially unsafe during an earthquake and should not be reoccupied.

Four courses of action were suggested: 1) Continue to monitor movement of the building and repair the two-story wing. 2) Demolish and remove the two-story wing or portions of it, and possibly build a new building in its location. 3) Continue monitoring of movement in the northern portion of the building. 4) Continue the monitoring program through several wet seasons to establish effects of future rainfall on the site.

On March 13, 1979, Harding-Lawson Associates issued a final report addressing the settlement monitoring at the site. There was slight lateral movement of the fill, but there were no indications to suggest a potential landslide. Settlement was still occurring within the two-story wing.

FIELD EXPLORATION AND LABORATORY TESTING

The subsurface conditions were explored by drilling a total of three borings at the locations shown on the Plot Plan, Plate 1. The borings were drilled with a truck-mounted rotary-wash drill rig to depths ranging from about 26-1/2 feet to 31-1/2 feet below the existing ground surface.

The field exploration was performed under the technical direction of one of our engineers who examined and visually classified the soils encountered, maintained a continuous log of boring, and obtained both relatively undisturbed and disturbed samples for laboratory examination and testing. Graphical presentation of the soils encountered is presented on the Log of Boring, Plates 2A through 2C. An explanation of the nomenclature and symbols used on the log of boring is shown on Plate 3, Soil Classification Chart & Key To Test Data. The log of boring shows subsurface conditions on the date and at the location indicated, and it is not warranted that it is representative of the subsurface conditions at other times or locations.

Laboratory tests were performed on selected soil samples to correlate the soil properties and to evaluate the engineering characteristics. Moisture content and dry density tests were performed on selected relatively undisturbed soil samples, and moisture content tests were performed on Standard Penetration Test (SPT) samples. The results of the laboratory testing are presented on the log of boring at the appropriate sample locations. Compaction test was performed on a representative sample of the fill material.

SITE CONDITIONS

SURFACE CONDITIONS

The San Francisco Police Academy occupies the same building formerly housing the Diamond Heights Elementary School. The playground area east of the building is currently being used as a parking lot. Based on visual observation, it appears that a portion of the southern end of the two-story wing of the original building has been removed. The two-story wing of the building currently appears substantially shorter on the southern end than in the aerial photographs and drawings dating back to 1977; however, records of the speculated demolition were not available.

Visible lateral movement of the building and the paved area was not observed at the site. The floor slabs in the hallways were noted to be sloping. Significant cracks were observed along the east wall of the northern portion of the building.

SUBSURFACE CONDITIONS

Fill was encountered to the depths explored in the three borings drilled for this investigation. Medium stiff to stiff gravelly clay with rock fragments was encountered in Borings 1 & 2 to a depth of 18 feet and 20 feet, respectively, below the existing ground surface. In Boring 1, the gravelly clay was underlain by stiff sandy clay to the depth explored. In Boring 2, the gravelly clay was underlain by loose to medium dense clayey gravel to the depth explored. Stiff sandy clay was encountered in Boring 3 to a depth of 8 feet below the existing ground surface. The stiff sandy clay was underlain by medium dense, wet, clayey gravel with rock fragments to a depth of 20 feet. The clayey gravel was

underlain by medium dense clayey gravel and sand to a depth of 26 feet. Medium dense clayey gravel was encountered below the clayey gravel and sand to the depth explored in Boring 3.

SEISMIC CONSIDERATIONS

The site is located in the seismically active San Francisco Bay Area and is subject to the effects of large magnitude earthquakes. The significant earthquakes that have occurred in the Bay Area are generally associated with crustal movement along well-defined active fault zones. The major faults include the San Andreas and Hayward which are located approximately 5 miles southwest and 13-1/2 miles northeast of the site, respectively.

DISCUSSION AND RECOMMENDATIONS

GENERAL

Based on the boring information for this investigation and available information from previous investigations performed at the site, it appears that the site is underlain by fill of clayey sand, gravel, and rock fragments. The fill appears to be on the order of 35 to 45 feet thick under the northern portion of the building and 60 to 90 feet thick under the southern portion of the building.

In the three borings drilled for this investigation the fill appears to be in a saturated condition with an average degree of saturation on the order of 84 percent to 94 percent. Based on the maximum dry density of 129 pounds per cubic foot, as determined by ASTM D-1557 test procedure, of a representative sample of the fill material it appears that the existing fill was compacted to a density ranging from 86 percent to 98 percent of the maximum dry density. Examination of the samples of the fill material, however, indicates that some of the material appears to be wet and soft. Sampling resistance during drilling of these three borings was lower than those recorded in 1969. Although the fill was substantially compacted, it has been the opinion that settlement should be anticipated from compression of the fill upon saturation.

We understand that the following two distinctly different development schemes are being considered for the site.

1) Seismically retrofit the existing building.
2) Construct new buildings on the site.

SETTLEMENT

Settlement monitoring was performed on the building during the periods of building settlement in the 1960s and the 1970s. Available records indicate that the last "continuous" settlement monitoring reading was taken in December 1984. For the current investigation a survey of the level of the existing floors and the columns was made by Martin M. Ron Associates in 1998 prior to the discovery of the survey readings performed in the 1980's. Correlation of the survey points for the 1998 elevation readings with readings taken between 1968 and 1984 proved difficult due to the different survey points and the speculated demolition of part of the southern portion of the building. A plot of average floor elevations of the building for 1968, 1969, and 1998, shown on Plate 4, San Francisco Police Academy Average Floor Elevations, indicates that the building has settled between 1968 and 1998.

Settlement of the northern portion of the building occurred in 1967, whereas settlement of the southern portion of the building did not occur until 6 years later in 1973, and was unexpected. The cause of the settlements was attributed to compression of the fill due to saturation. The saturation of the fill in 1967 and 1973 was correlated by Harding-Lawson Associates to higher than normal rainfall in those years. Higher than normal rainfall occurred in the winter of 1997; however, survey readings were not taken between December 1984 and August 1998. Given the large duration of time between the two survey readings, it cannot be concluded that the settlement which occurred between 1984 and 1998 correlates with the higher than normal rainfall in 1997.

It should be noted that the center portion of the building did not experience a large amount of settlement as the northern and southern portions of the building. If saturation of the fill under the center portion of the building should occur, settlement similar to those in the northern and southern portions of the building should be expected. We estimate that the amount of settlement could be on the order of one foot in the center of the building, similar to the occurrences for both the northern and southern portions of the building.

Time-settlement plots of the subject building since 1968, with added readings recently surveyed in 1998, indicate that the building has settled on the order of 1.7 inches between 1984 and 1998. Time-settlement plots are presented in Plates 5A through 5E, San Francisco Police Academy Floor Elevations - Arithmetic Scale, and Plates 6A through 6E, San Francisco Police Academy Floor Elevations - Semi-logarithmic Scale. We anticipate that the rate of settlement would be diminishing. It is difficult to predict, with any reasonable accuracy, the amount of the anticipated settlements and the period over which the settlements will occur, given that the period of settlement in 1973 was unforeseen and that the speculated causes of the previous settlements have not been conclusive. Additional settlement of 2 to 3 inches over the next 15 years may occur at a rate of 1/8 inch per year, assuming that saturation of the fill under the center portion of the building does not occur.

SCHEME 1: SEISMIC RETROFIT

For seismic retrofit, we recommend that the proposed shear walls or other structural elements be supported on a shallow foundation of spread footings bearing on the compacted fill, in a similar manner as the existing foundation footings. We recommend that possible significant settlement of the center portion of the building should be taken into consideration.

Foundation Support

For the proposed shear walls and other structural elements, we recommend a shallow foundation of spread footings bearing on the compacted fill using an allowable bearing pressure of 2,000 pounds per square foot for dead plus live loads. The allowable bearing pressures may be increased by one-third for total design loads, including wind or seismic. The footings should be founded at least 18 inches below the lowest adjacent grade. Continuous footings should be at least 24 inches wide. The weight of the foundation concrete below grade may be neglected in computing bearing pressures.

In consideration of the potential of significant ground shaking, the structures should be designed with seismic forces in mind. To resist seismic effects, we suggest that the footings be tied together with grade beams or a diaphragm slab.

Resistance to lateral loads can be developed in friction between the foundation and the supporting subgrade using a frictional resistance of 0.3. Additional resistance may be developed by passive pressure of 250 pounds per cubic foot for the portion of the footings and grade beams embedded in the soil. Unless the surface is paved, the upper foot of soil should be neglected in computing the passive resistance.

We estimate that the settlement due to structural loads from the structural elements founded on a shallow foundation of isolated and continuous footings, designed and constructed as discussed above, will be relatively small, probably less than one inch.

Settlement Monitoring

We recommend that a program of monitoring and evaluation of building performance be adopted. As part of this, we recommend that elevation readings be taken at representative locations on the foundations and floor slab at regular time intervals. This record would be reviewed by our office and your structural engineer.

SCHEME 2: NEW CONSTRUCTION

For construction of new facilities at the site, we recommend that the proposed buildings be supported on a shallow foundation bearing on the existing fill and/or compacted fill.

The large amount of settlement which occurred in the southern portion of the building in 1976 was unpredicted and unexpected. Although we do not anticipate that total and differential settlements of such magnitude would occur, it is prudent to plan for such unexpected settlements.

Foundation Support

The foundation should be laid out in a grid-like pattern which ties all of the foundation elements together in two directions in order to resist deflection resulting from settlements and seismic effects. For spread footings bearing on the existing fill or on compacted fill after appropriate site preparation, we recommend that the footings be designed using an allowable bearing pressure of 2,000 pounds per square foot for dead plus live loads. The allowable bearing pressures may be increased by one-third for total design load, including wind or seismic. The footings should be founded at least 18 inches below the lowest adjacent grade. Continuous footings should be at least 15 inches wide, and isolated spread footings should be at least 24 inches wide. The weight of the foundation concrete below grade may be neglected in computing the bearing pressures.

In order to resist the effect of differential settlement, the wall footings and grade beams should be designed as stiff strong beams capable of resisting both positive and negative moments. We suggest that they be designed to span at least 20 feet carrying the full structural load (dead plus real live loads above the foundation level). Continuity of beam strength should be maintained at locations such as steps in footings, offsets of footings, etc.

Resistance to lateral loads can be developed in friction between the footing and the compacted fill using a coefficient of friction of 0.3. Additional resistance may be developed by a passive pressure of 250 pounds per cubic foot for the portion of the footings and grade beams below grade. Unless

the surface is paved, the upper foot of embedment should be neglected in computing the passive resistance.

We estimate that the settlement of the structure, due to structural loads, founded on a shallow foundation of isolated and continuous footings, designed and constructed as discussed above, will be relatively small, probably less than one inch.

As an alternative to spread footings and grade beams, the structures may be supported on a mat foundation bearing on the fill after appropriate site preparation. The bottom of the mat foundation should be founded at least 12 inches below the lowest adjacent grade. The foundation should be reinforced to resist bending equally in either an upward or downward direction. This is intended to provide strength to redistribute loads and also to minimize differential settlements caused by variations in the underlying soil. Sufficient reinforcement should be provided in the mat to distribute the superimposed structural loads assuming a span of 20 feet at any location and cantilever of 10 feet (but not more than one-quarter the dimension of the building).

Settlement Monitoring

In view of the possibility of significant total and differential settlements, we recommend that a program of monitoring and evaluation of building performance be adopted. As part of this, we recommend that elevation readings be taken at representative locations on the foundations and floor slab at the time of pouring, at completion of construction, and at appropriate times thereafter. This record would be reviewed by our office and your structural engineer. Knowledge of the details of settlement behavior will be valuable in case remedial measures become necessary or if differential settlements are suspected of contributing to building distress. Periodic releveling of the buildings should be anticipated and may be required to provide proper performance of the buildings. It is our opinion that a stiff foundation with monitoring of settlement, and possible releveling, would provide satisfactory foundation support.

SITE PREPARATION

The intent of this work is to provide well-compacted soil to support the building foundation.

We recommend the following minimum procedures be undertaken for site preparation in the construction area and extending at least 5 feet beyond the perimeter of the building area. The lateral extent of the site preparation will be restricted along the property lines and existing buildings and facilities. The work should be carried out under the observation and testing of our geotechnical engineering staff.

1. Remove all existing pavements, concrete walkways, curb and gutter and other deleterious debris and dispose off site. Remove all below grade construction, obstructions or debris and dispose off site.

2. After performing the required cutting operation and prior to any filling, proofroll the exposed surface with at least six passes of a heavy vibrating compactor, such as Dynapac CA-15, Rascal 303-A, Ingersoll-Rand SP-48 or equal.

In areas showing extensive weaving or pumping and where loose or soft soils are found at the bottom of the exposed surface, excavate to greater depth and replace with compacted materials as required.

3. After proofrolling, scarify the exposed surface to a depth of at least 8 inches and condition to near optimum moisture content and compact to at least 90 percent of the maximum dry density as determined by ASTM D-1557 test procedure.

4. Place the backfill and fill to meet design grade in layers not exceeding 8 inches thick (loose condition), condition to approximately optimum moisture content and compact to at least 90 percent of the maximum dry density as determined by the ASTM D-1557 test procedure.

Structure backfill and backfill for utility trenches should be placed in the manner described in item 4.

All excavations should be dewatered prior to placement of backfill or fill. It is recommended that jetting of fill and backfill for compaction not be permitted.

REPORT LIMITATIONS

Our services have been performed with the usual thoroughness and competence of the engineering profession. No other warranty or representation, either expressed or implied, is included or intended.

The conclusions and recommendations presented in this report are professional opinions based on project criteria and data described in this report, and are intended only for the purpose, site location and project indicated. If there is a significant change in the project, or if different soils are encountered from those indicated, Trans Pacific Geotechnical Consultants, Inc. should be notified for evaluation and supplemental recommendations as necessary or appropriate.

Trans Pacific Geotechnical Consultants, Inc. cannot be responsible for interpretations made by others with regard to foundation support or other recommendations presented in this report.

CLOSURE

It is suggested that our office be consulted during design to answer any questions and provide clarification regarding our report. We request an opportunity to review appropriate portions of the final plans and specifications. Adequate engineering observation and testing should be provided during construction to provide reasonable assurance that pertinent provisions of the plans and specifications are properly carried out.

If you have any questions regarding this report, please contact us. The following plates are attached and complete this report.

Plate 1	Plot Plan
Plate 2A through 2C	Log of Boring
Plate 3	Soil Classification Chart & Key to Test Data
Plate 4	San Francisco Police Academy Average Floor Elevations
Plate 5A through 5E	San Francisco Police Academy Floor Elevations Arithmetic Scale
Plate 6A through 6E	San Francisco Police Academy Floor Elevations Semi-logarithmic Scale

Yours very truly,
Trans Pacific Geotechnical Consultants, Inc.

DRAFT

Eddy T. Lau, P.E.
Reg. Civil Engineer 019897
Reg. Geotechnical Engineer 506
Expiration 9/30/2001

DRAFT

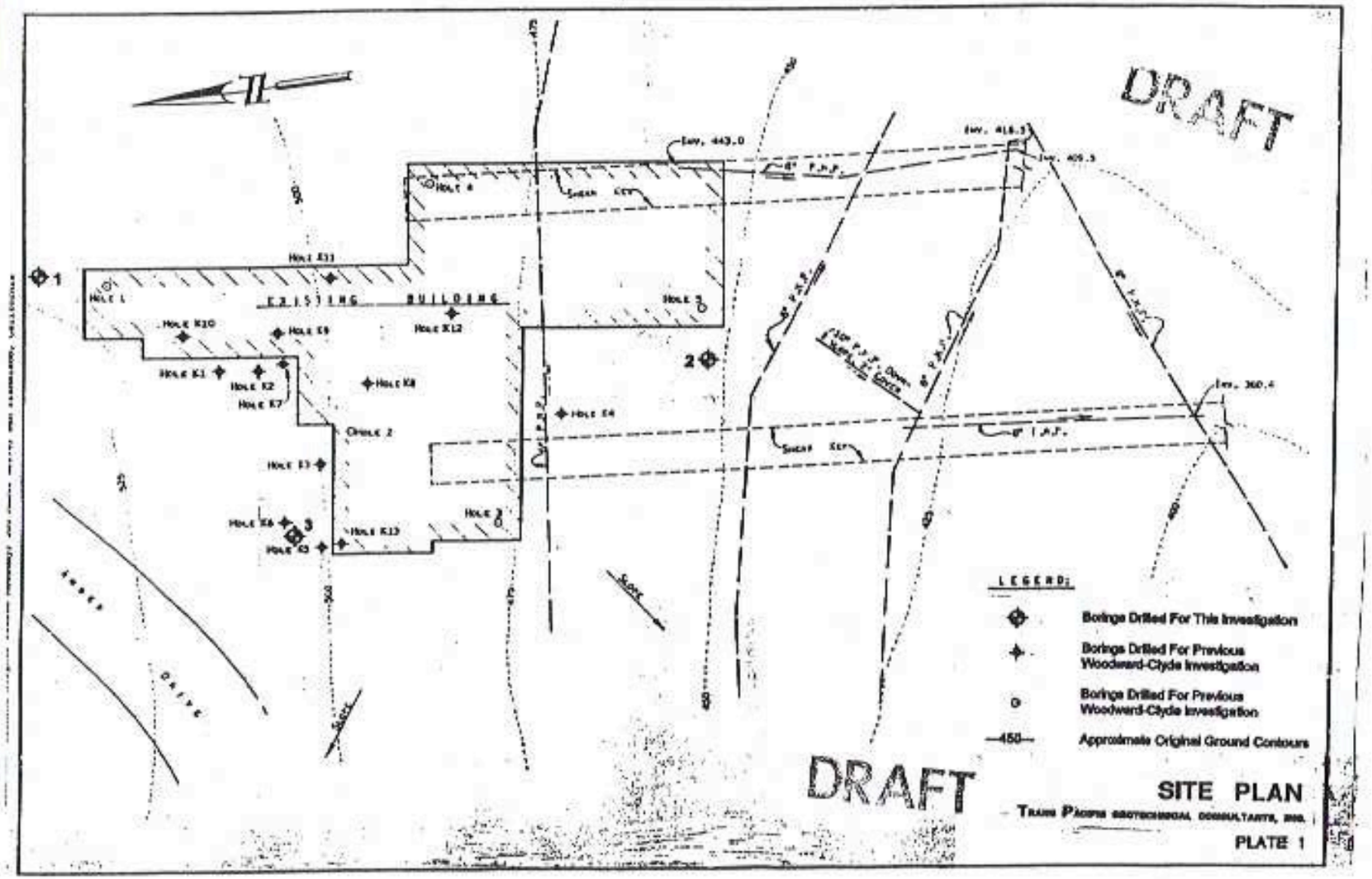
Marlene Wong
Project Engineer

(Six copies submitted)

cc: Baker & Vilar Architects (2)
461 Second Street, Suite C127
San Francisco, California 94107
Attention: Mr. Jose Vilar

SOHA Engineers (2)
550 Kearny Street, Suite 200
San Francisco, California 94108
Attention: Mr. John Earle

WPX:1393029.RE2


DRAFT
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EXISTING BUILDING
Hole 1
Hole 2
Hole 3
Hole 4
Hole E1
Hole E2
Hole E3
Hole E4
Hole E5
Hole E6
Hole E7
Hole E8
Hole E9
Hole E10
Hole E11
Hole E12
Hole E13
Inv. 443.0
Inv. 416.3
Inv. 405.3
Inv. 360.4
Sump
Sump
Sump
Sump
Sump Key
Sump Key
8" P.V.C.
8" P.V.C.
8" P.V.C.
8" P.V.C.
10" P.V.C. Storm Drain
Amber Drive
LEGEND:
Borings Drilled For This Investigation
Borings Drilled For Previous Woodward-Clyde Investigation
Borings Drilled For Previous Woodward-Clyde Investigation
450
Approximate Original Ground Contours
SITE PLAN
Trans Pacific Geotechnical Consultants, Inc.
PLATE 1

BORING 1

DATE DRILLED: 9/8/98

ELEVATION: feet

DRAFT

DEPTH IN FEET	LAB DATA: MOISTURE CONTENT (%)	LAB DATA: DRY DENSITY (PCF)	SAMPLING: SAMPLER TYPE	SAMPLING: SAMPLING RESISTANCE	SAMPLES	SYMBOLS	DESCRIPTION
0							4in. Asphaltic Concrete over 8 in. Aggregate Base
	17	111	MC			GC	Yellowish brown gravelly CLAY, (medium stiff to stiff)
5	16	116	MC	22			(grading dark brown with rock fragments, stiff to very stiff)
10	16	116	MC	22		GC	Reddish brown clayey GRAVEL,(stiff)
15	15	117	MC	34		GC	Green and dark gray gravelly CLAY, (medium stiff to stiff)
20	16	115	MC	27		SC	Yellowish brown sandy CLAY, (stiff)
25			MC	26			
30	25	104	MC	14			(grading clayey and with rock fragments, medium stiff)
35							

NOTES:

1. Boring terminated at a depth of 31.5 feet.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soil Classification Chart and Key to Test Data, Plate 3.

LOG OF BORING

Trans Pacific Geotechnical Consultants, Inc.

1393-029 Diamond Heights Police Academy, 350 Amber Drive, San Francisco, California.

PLATE 2A

BORING 2

DATE DRILLED: 9/8/98

ELEVATION: feet

DRAFT

DEPTH IN FEET	LAB DATA: MOISTURE CONTENT (%)	LAB DATA: DRY DENSITY (PCF)	SAMPLING: SAMPLER TYPE	SAMPLING: SAMPLING RESISTANCE	SAMPLES	SYMBOLS	DESCRIPTION
0							2in. Asphaltic Concrete over 6in. Aggregate Base
	17	115	MC	30		GC	Brown gravelly CLAY with abundant rock fragments, dry, (stiff)
5	8	119	MC	27			
10	17	119	MC	36		GC	Yellowish brown gravelly CLAY with rock fragments, wet, (medium stiff to stiff)
15	11	131	MC	31			
20			MC	41		GC	Grayish brown clayey GRAVEL, (loose to medium dense)
25	8	127	MC	26			
30							
35							

NOTES:

1. Boring terminated at a depth of 26.5 feet.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soil Classification Chart and Key to Test Data, Plate 3.

1393-029 Diamond Heights Police Academy, 350 Amber Drive, San Francisco, California.

LOG OF BORING

Trans Pacific Geotechnical Consultants, Inc.

PLATE 2B

BORING 3

DATE DRILLED: 9/8/98

ELEVATION: feet

DRAFT

DEPTH IN FEET	LAB DATA: MOISTURE CONTENT (%)	LAB DATA: DRY DENSITY (PCF)	SAMPLING: SAMPLER TYPE	SAMPLING: SAMPLING RESISTANCE	SYMBOLS	DESCRIPTION
0						2in. Asphaltic Concete over 6in. Aggregate Base
	13	115	MC	13	SC	Brown sandy CLAY, moist, (stiff)
5	18	109	MC	17		
10	12	123	MC	43	GC	Reddish brown clayey GRAVEL with abundant rock fragments, wet, (medium dense) (grading more clayey)
15	8	133	MC	34		
20	4	115	MC	35	GC-SC	Brown clayey GRAVEL and SAND, wet, (medium dense) (grading loose and less gravelly)
25			MC	20		
30	8	129	MC	52	GC	Grayish brown clayey gravel, medium dense)
35						

NOTES:

1. Boring terminated at a depth of 31.5 feet.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soil Classification Chart and Key to Test Data, Plate 3.

LOG OF BORING

Trans Pacific Geotechnical Consultants, Inc.

1393-029, Diamond Heights Police Academy, 350 Amber Drive, San Francisco, California.

PLATE 2C

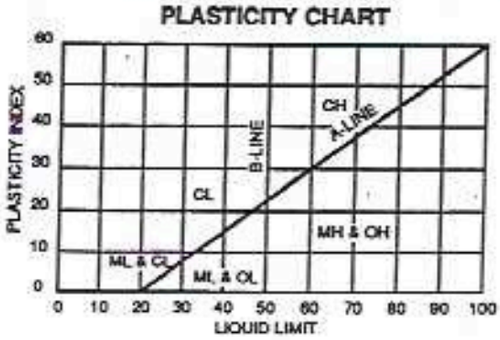
UNIFIED SOIL CLASSIFICATION SYSTEM

SYMBOL	LETTER	DESCRIPTION	MAJOR DIVISIONS		
	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	CLEAN GRAVELS (LITTLE OR NO FINES)	GRAVELS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	COARSE-GRAINED SOILS MORE THAN 50% OF MATERIAL IS RETAINED ON NO. 200 SIEVE
	GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES			
	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES			
	SW	WELL-GRADED SAND, GRAVELLY SANDS, LITTLE OR NO FINES	CLEAN SANDS (LITTLE OR NO FINES)	SANDS 50% OR MORE OF COARSE FRACTION PASSES NO. 4 SIEVE	
	SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES			
	SM	SILTY SANDS, SAND-SILT MIXTURES	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES			
	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY	SILTS & CLAYS (LIQUID LIMIT LESS THAN 50)		FINE-GRAINED SOILS 50% OR MORE OF MATERIAL PASSES THE NO. 200 SIEVE
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS			
	OL	ORGANIC SILTS AND ORGANIC SILT-CLAYS OF LOW PLASTICITY			
	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS	SILTS & CLAYS (LIQUID LIMIT 50 OR MORE)		
	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS			
	OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS			
	PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	HIGHLY ORGANIC SOILS		

FOR VISUAL CLASSIFICATION, THE 1/4" SIZE MAY BE USED AS EQUIVALENT TO THE NO. 4 SIEVE SIZE

THE NO. 200 U.S. STANDARD SIEVE SIZE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE

PLASTICITY CHART



KEY TO SAMPLES

- INDICATES DEPTH OF UNDISTURBED SAMPLE
- INDICATES DEPTH OF DISTURBED SAMPLE
- INDICATES DEPTH OF SAMPLING ATTEMPT WITH NO RECOVERY
- INDICATES DEPTH OF STANDARD PENETRATION TEST
- INDICATES DEPTH OF UNDISTURBED "S" (SHELBY) TYPE SAMPLE

TYPES OF SOIL SAMPLERS

MC - MODIFIED CALIFORNIA SAMPLER
NX - ROCK CORING
P - PISTON SAMPLER
PT - PITCHER BARREL SAMPLER
S - SHELBY SAMPLER
SPT - STANDARD PENETRATION TEST SAMPLER
U - UNDERWATER SAMPLER

KEY TO TEST DATA

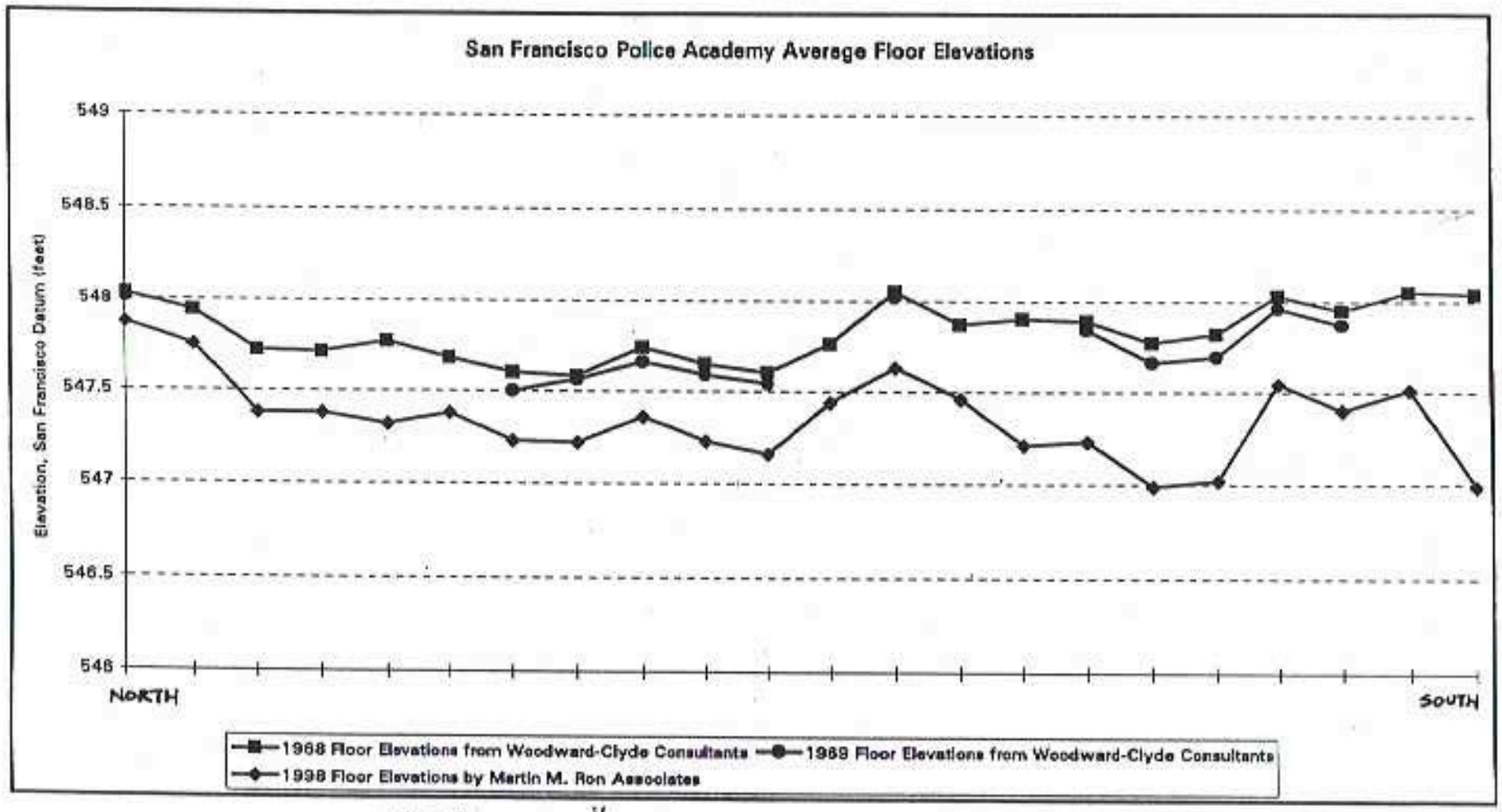
GS - GRAIN-SIZE DISTRIBUTION
DSCU - DIRECT SHEAR TEST, CONSOLIDATED - UNDRAINED
DSUU - DIRECT SHEAR TEST, UNCONSOLIDATED - UNDRAINED
TXUU - TRIAXIAL COMPRESSION TEST, UNCONSOLIDATED - UNDRAINED

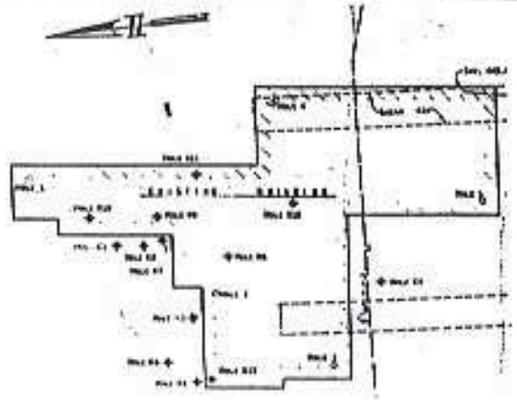
SOIL CLASSIFICATION CHART AND KEY TO TEST DATA

Trans Pacific Geotechnical Consultants, Inc.

PLATE 3

JOB NO. 1393-029





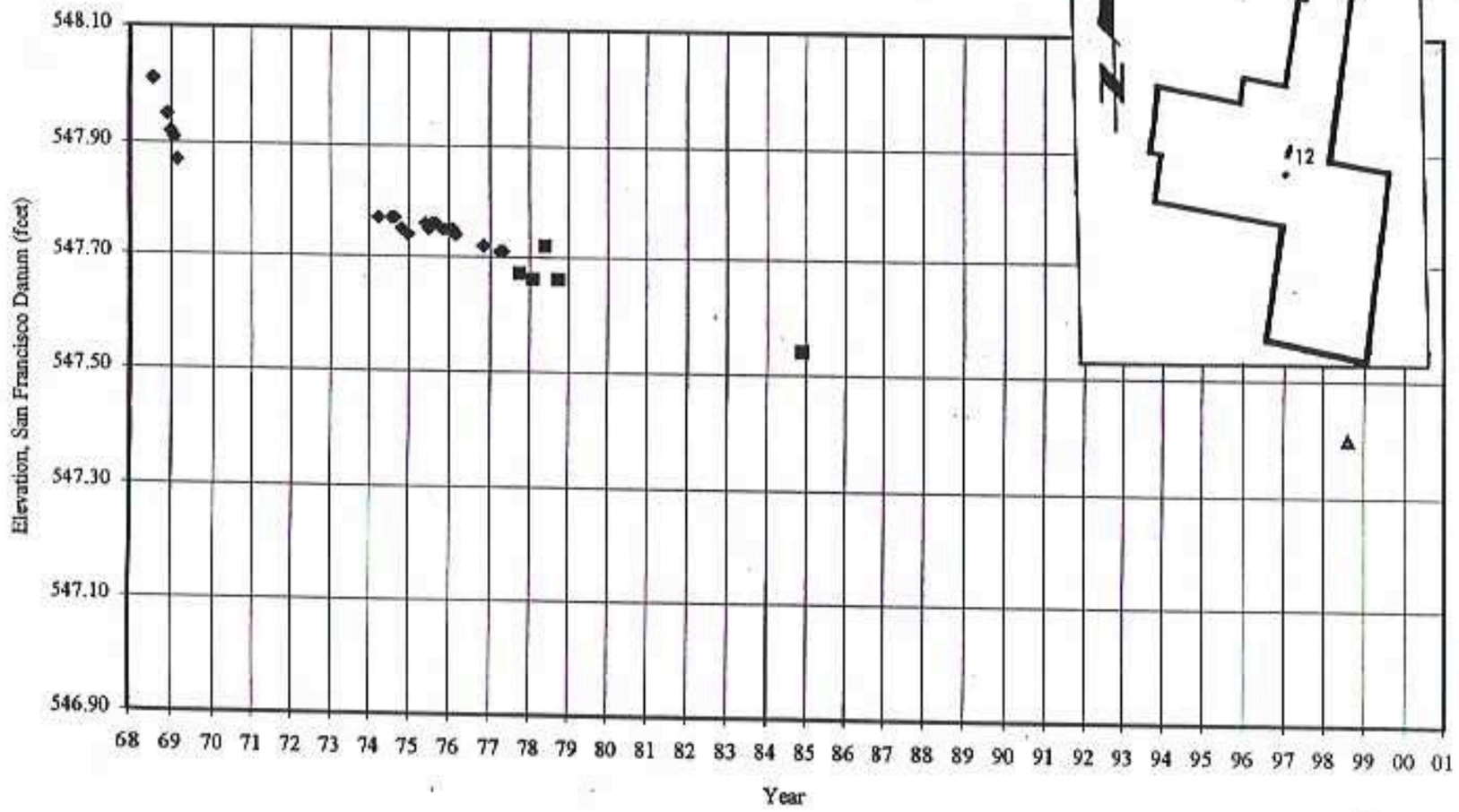
TRANS PACIFIC GEOTECHNICAL CONSULTANTS, INC.

DRAFT

PLATE 4

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.12



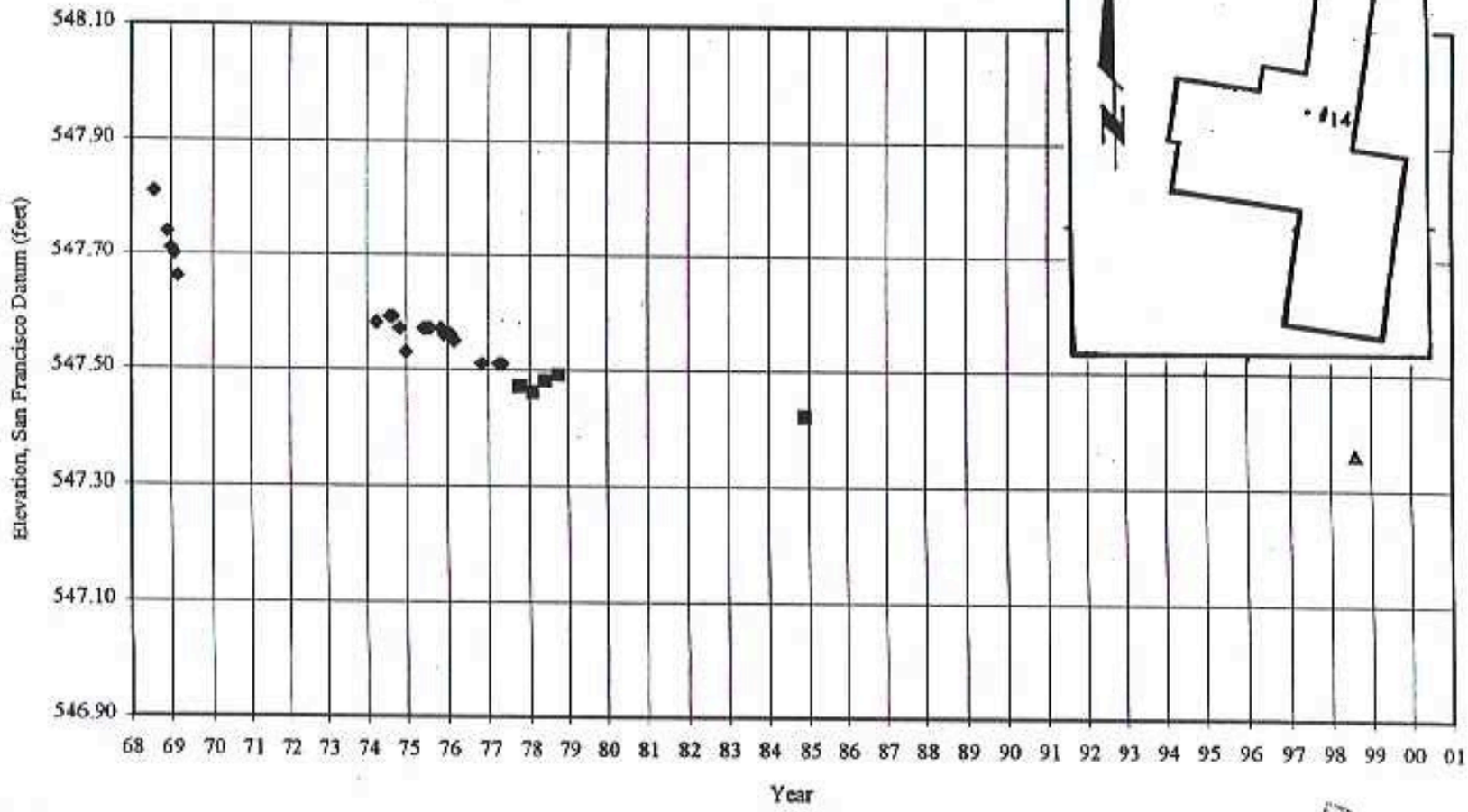
*Reading is in vicinity of Point No. 12

Trans Pacific Geotechnical Consultants, Inc.

PLATE 5A

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.14



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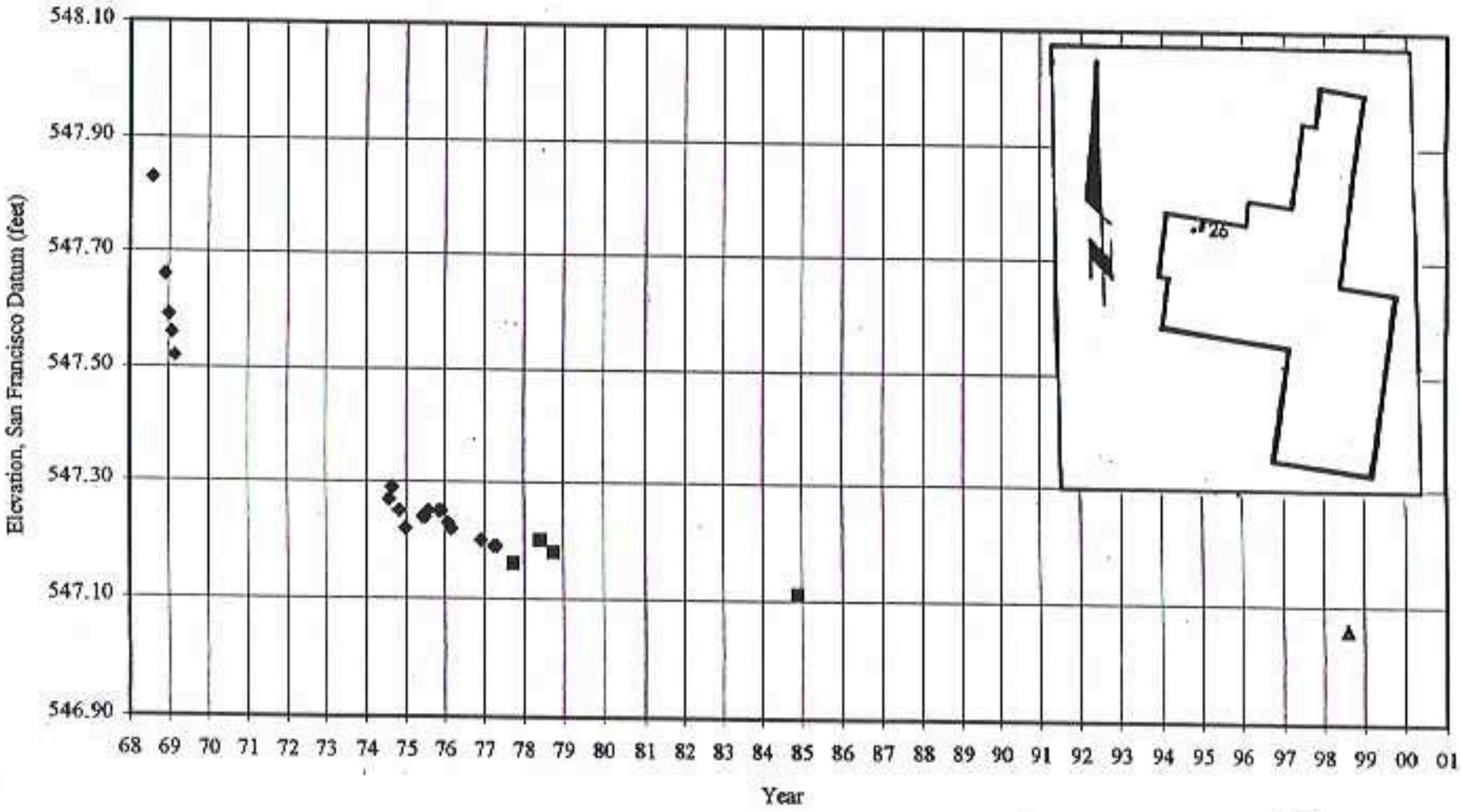
*Reading is in vicinity of Point No. 14

Trans Pacific Geotechnical Consultants, Inc.

PLATE 5B

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.26



DRAFT

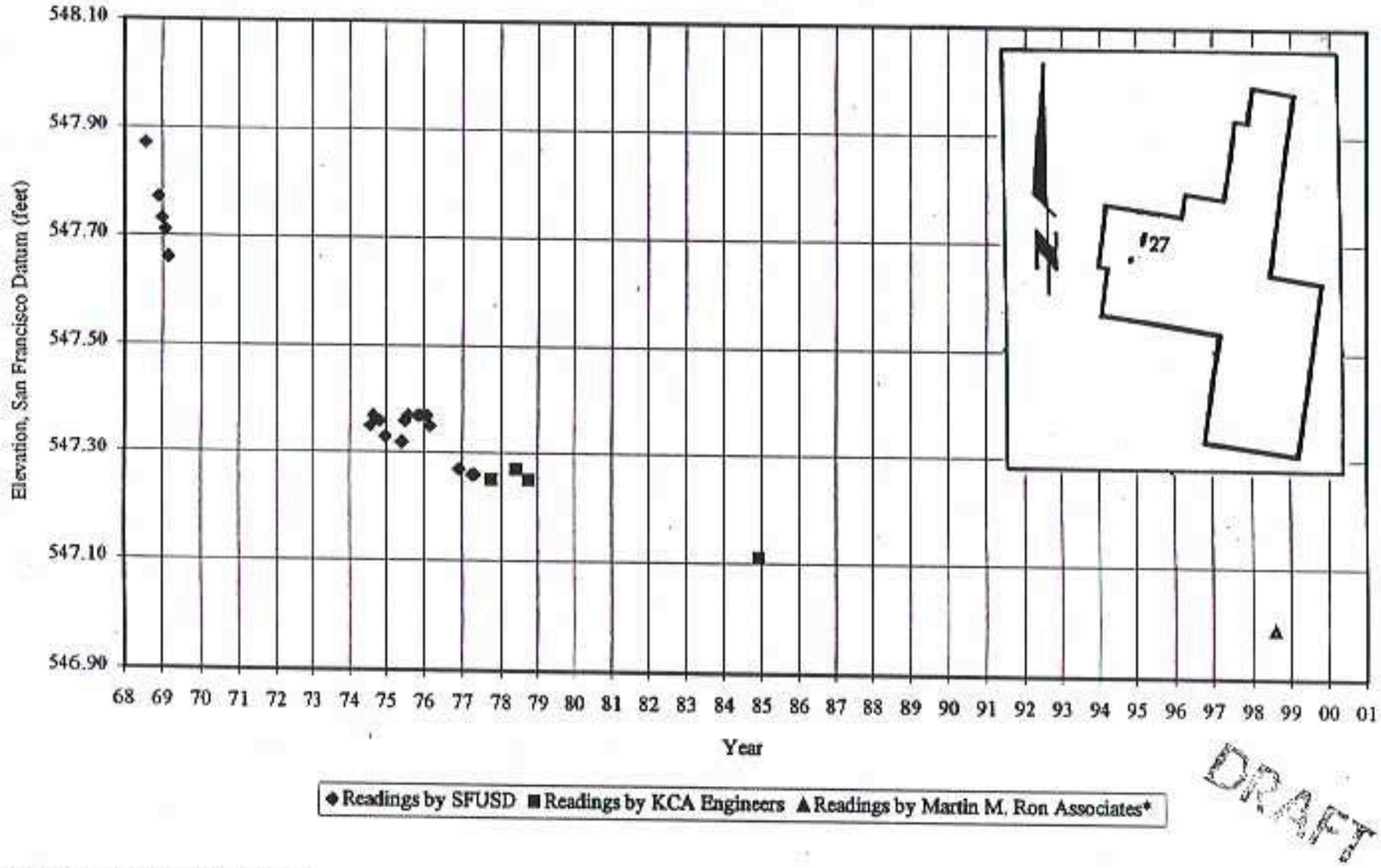
*Reading is in vicinity of Point No. 26

Trans Pacific Geotechnical Consultants, Inc.

PLATE 5C

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.27



DRAFT

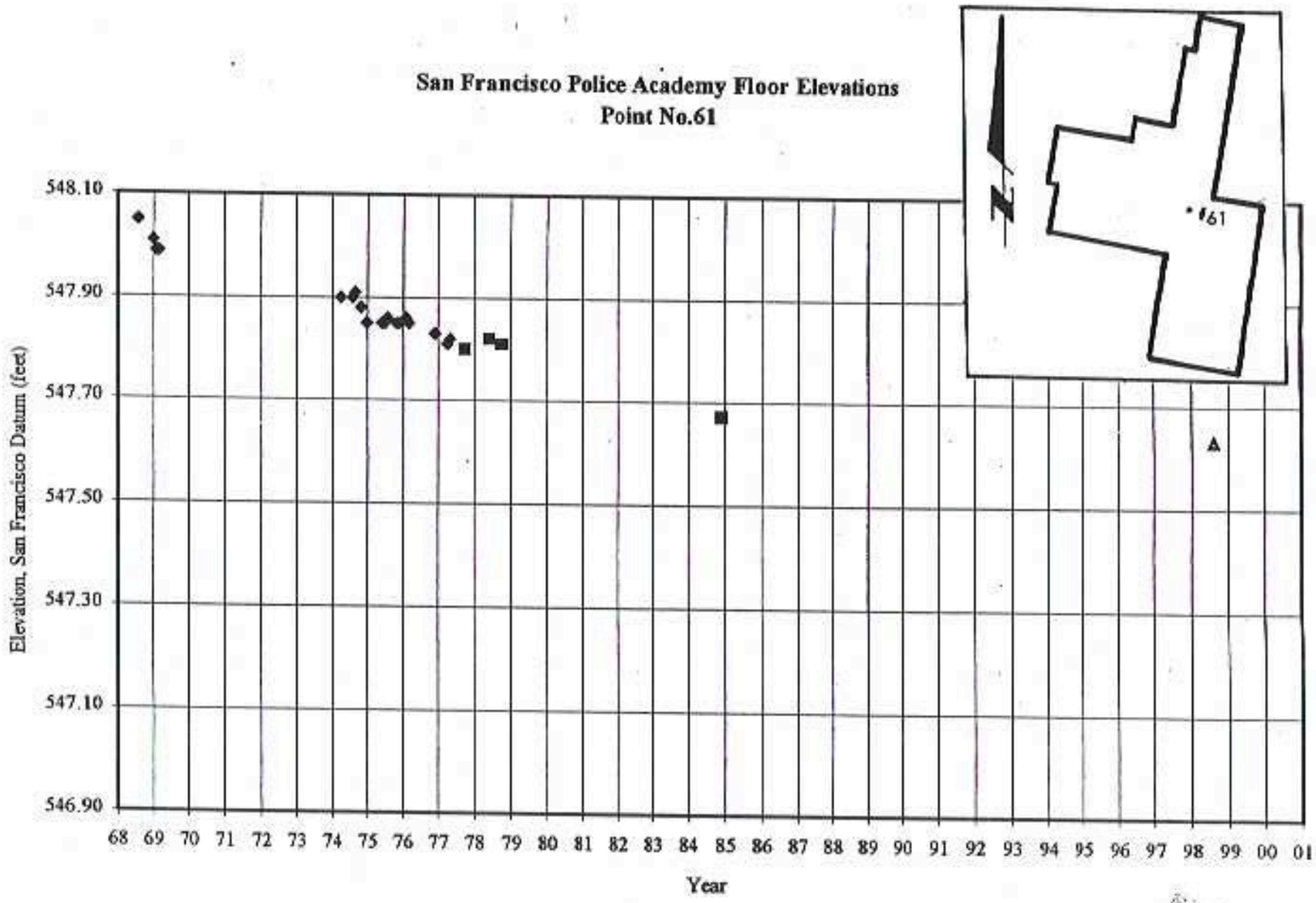
*Reading is in vicinity of Point No. 27

Trans Pacific Geotechnical Consultants, Inc.

PLATE 5D

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.61



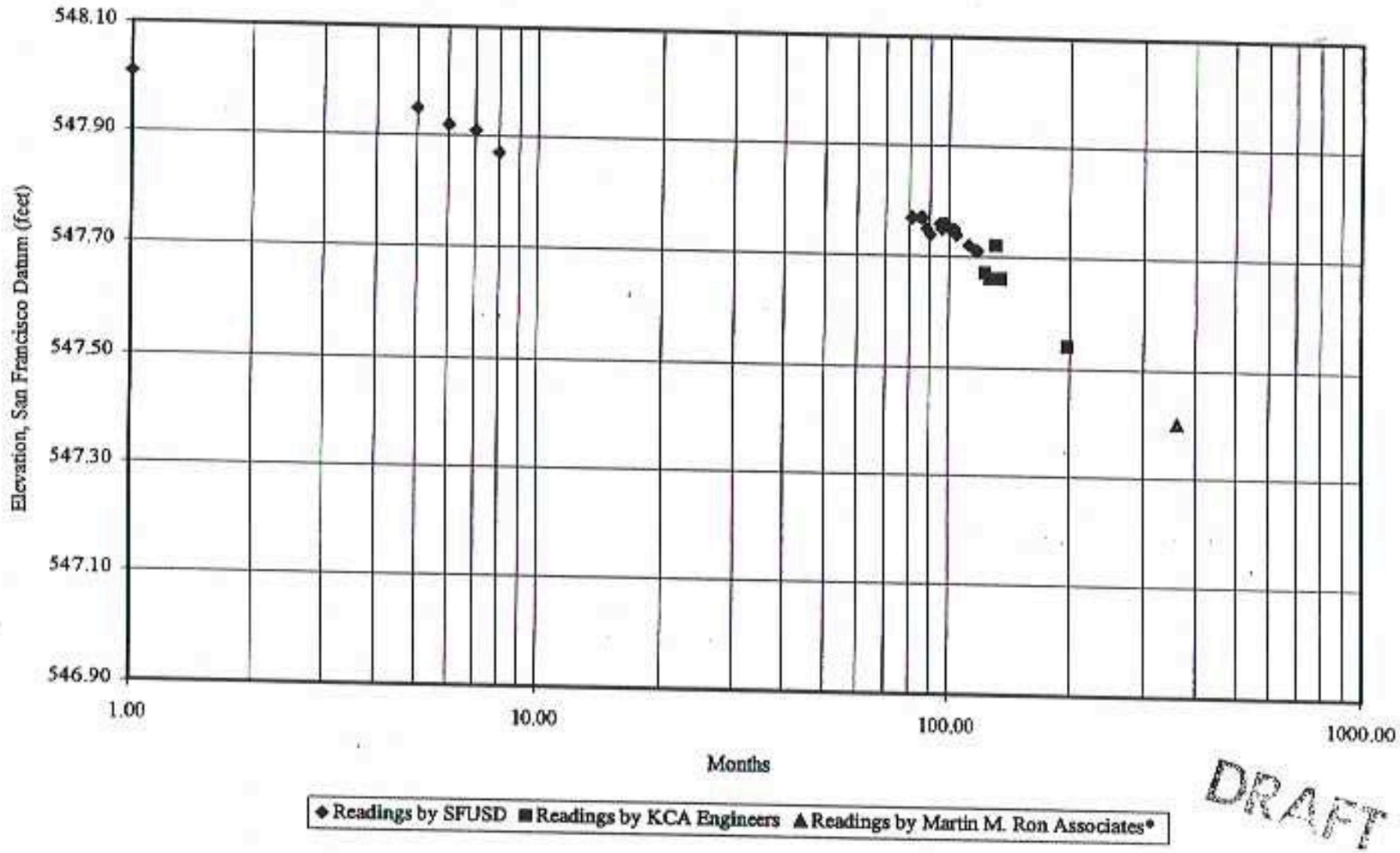
*Reading is in vicinity of Point No. 61

Trans Pacific Geotechnical Consultants , Inc.

PLATE 5E

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.12

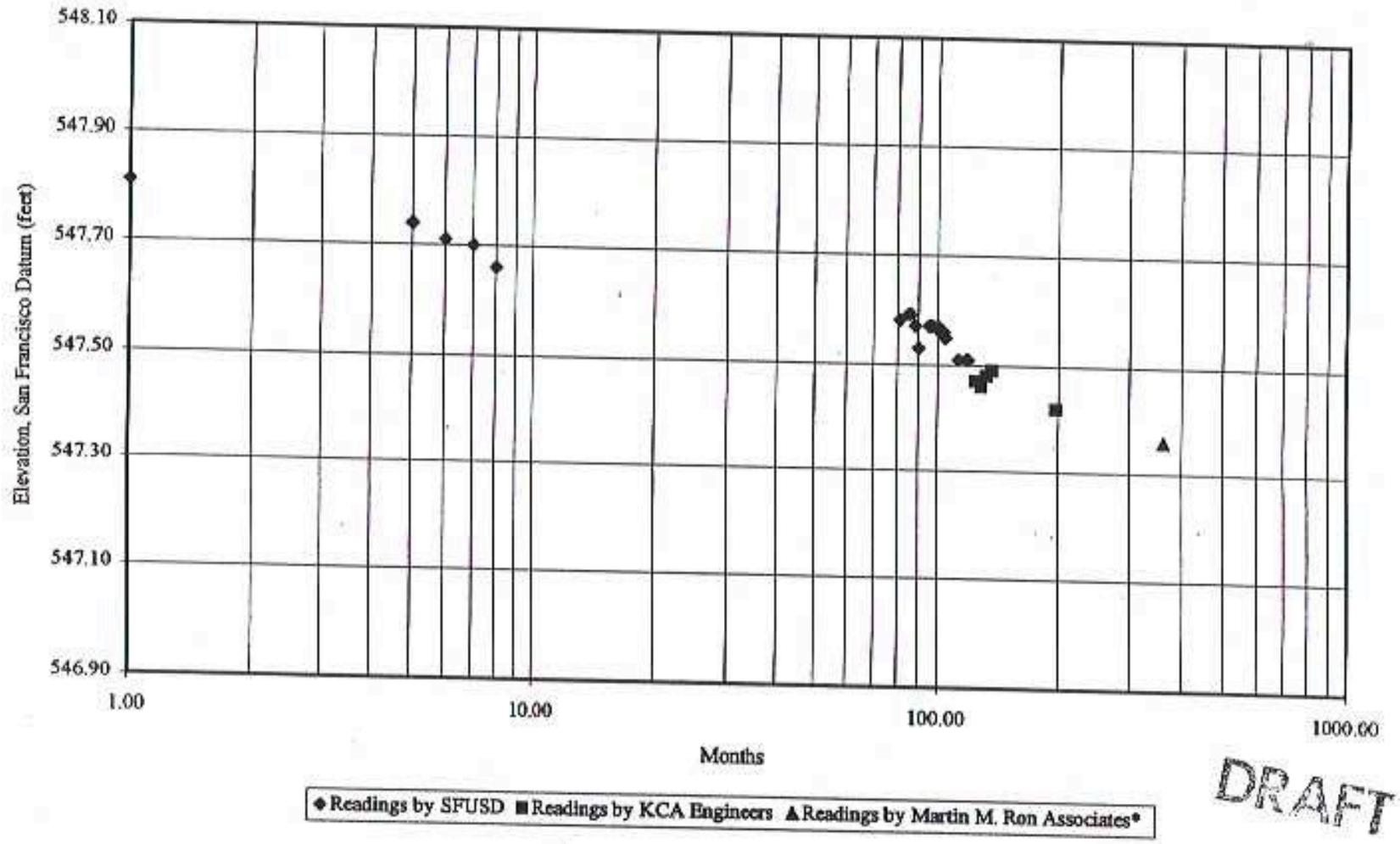


DRAFT

*Reading is in vicinity of Point No. 12

Trans Pacific Geotechnical Consultants, Inc.
PLATE 6A

San Francisco Police Academy Floor Elevations
Point No.14



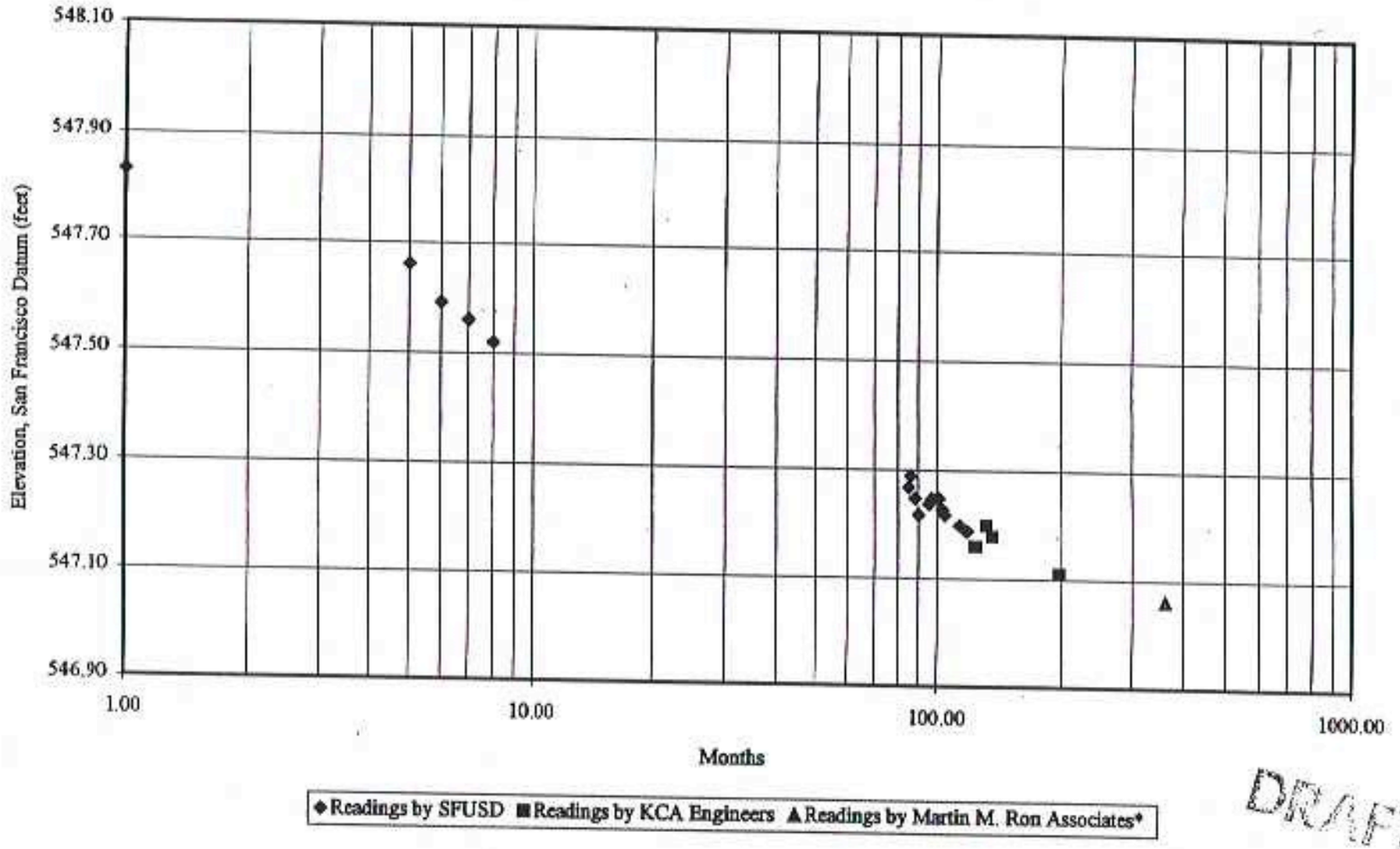
DRAFT

*Reading is in vicinity of Point No. 14

Trans Pacific Geotechnical Consultants, Inc.
PLATE 6B

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.26

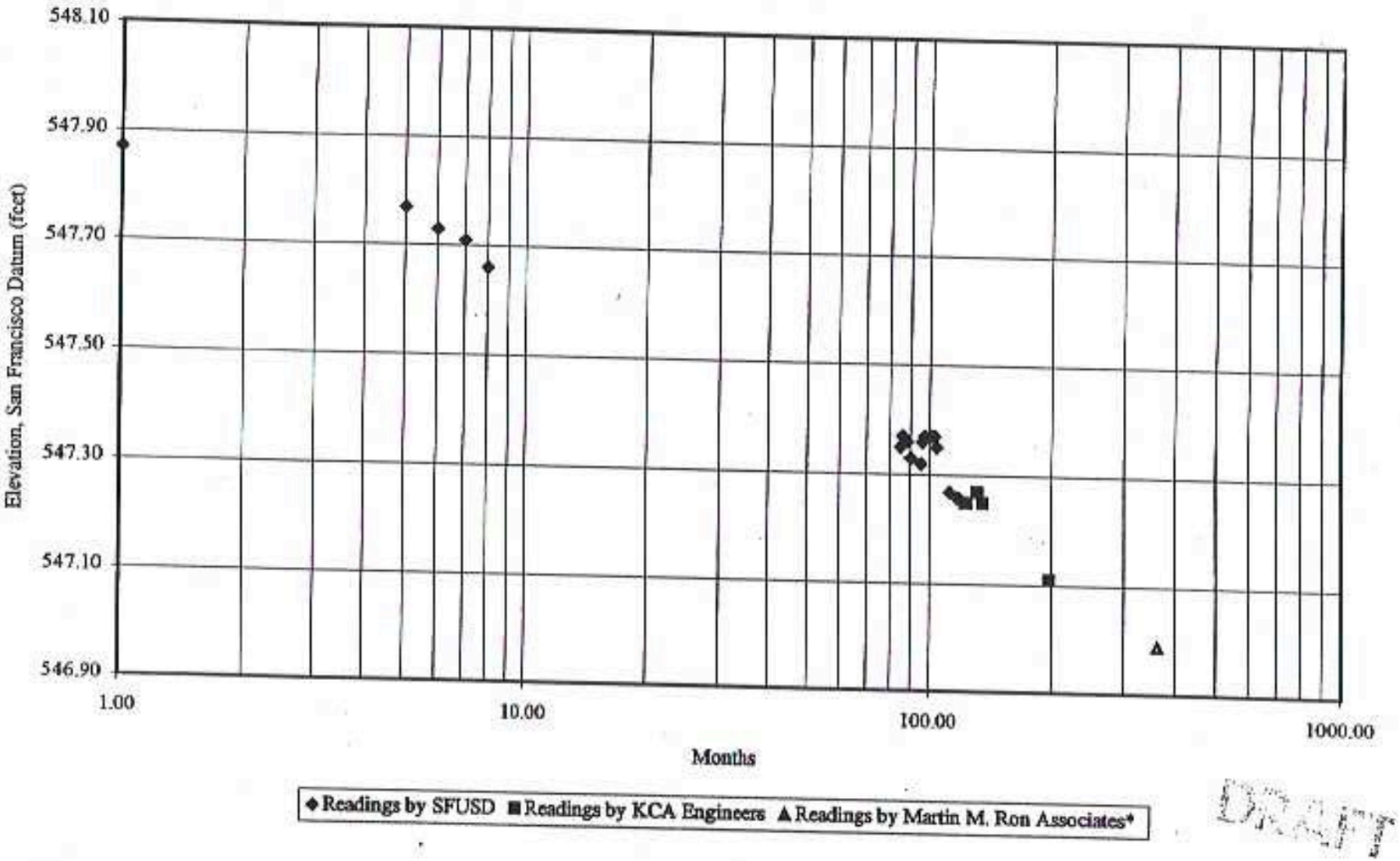


DRAFT

*Reading is in vicinity of Point No. 26

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.27



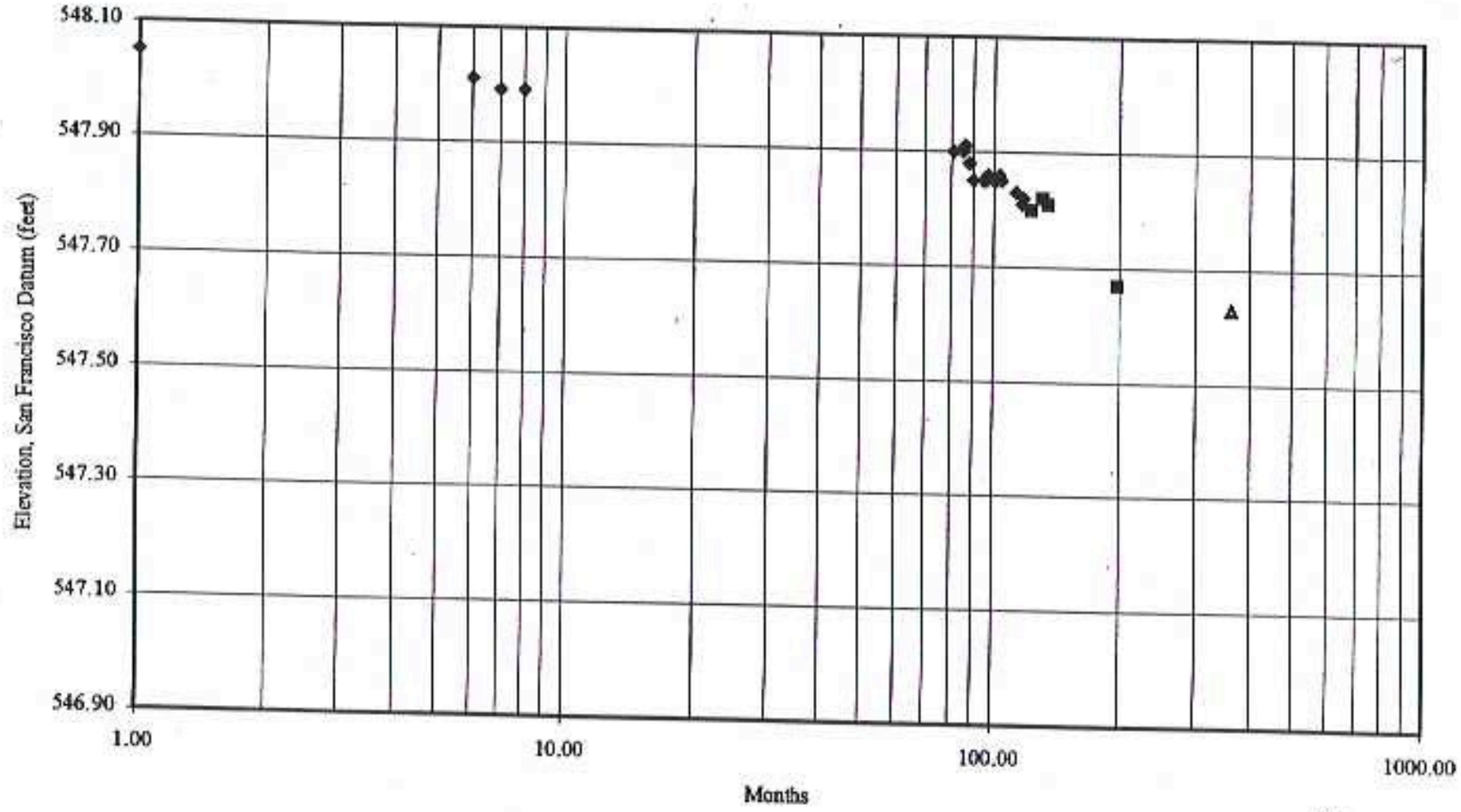
*Reading is in vicinity of Point No. 27

Trans Pacific Geotechnical Consultants, Inc.

PLATE 6D

Job No. 1393-029

San Francisco Police Academy Floor Elevations
Point No.61



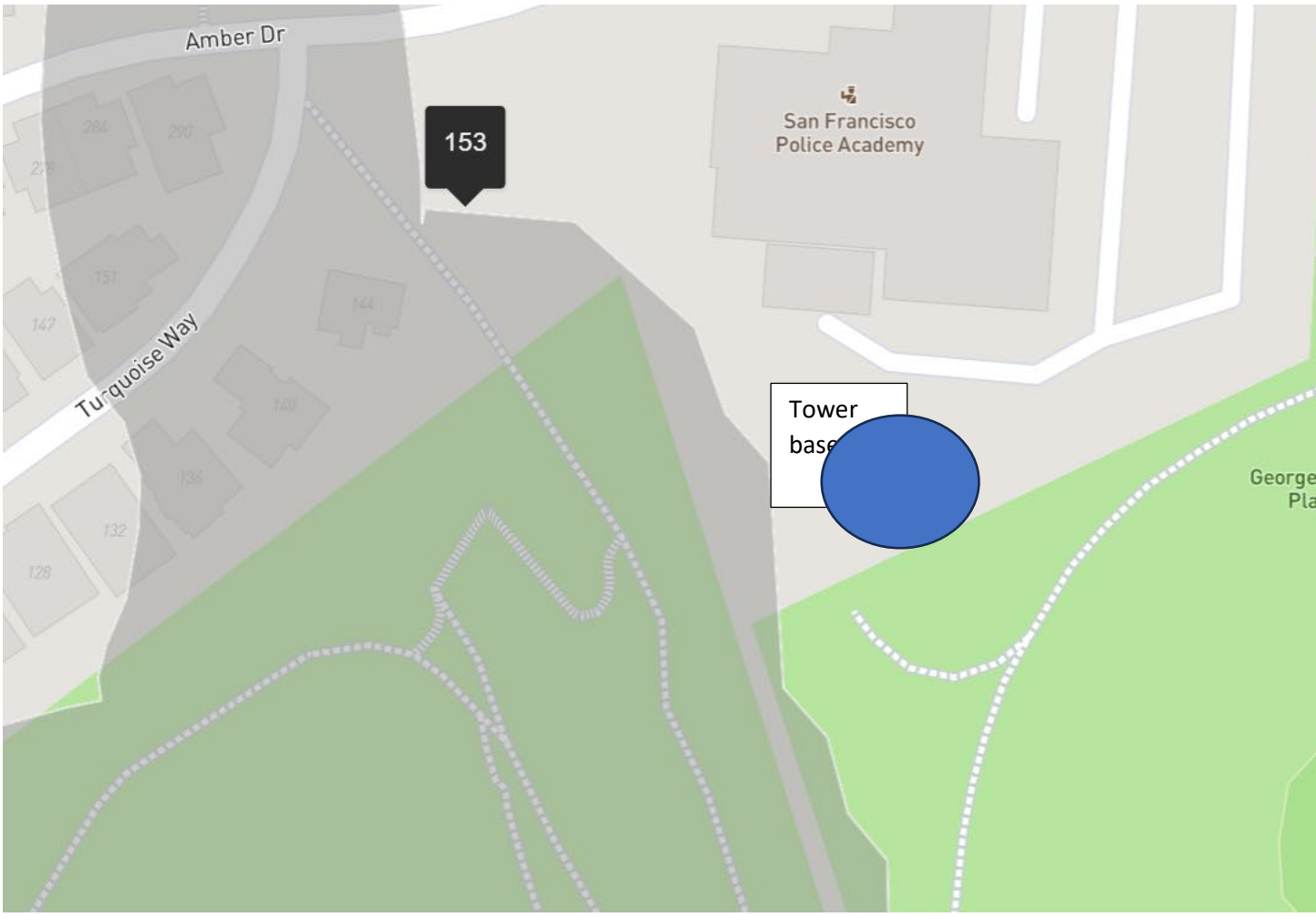
DRAFT

*Reading is in vicinity of Point No. 61

Trans Pacific Geotechnical Consultants , Inc.

PLATE 6E





Blue dot location of ATT proposed MACRO Tower SF Seismic Hazard Map. Gray area = seismic landslide area Green area on left = Glen Canyon Park
https://data.sfgov.org/-/San-Francisco-Seismic-Hazard-Zones/7ahv-68ap

BOARD of SUPERVISORS

City Hall
1 Dr. Carlton B. Goodlett Place
Room 244
San Francisco, CA 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

Request for Continuance - Conditional Use Appeal Hearing

Continuance requests are contingent upon approval by the Board of Supervisors. On the day of the appeal hearing, if a motion is entertained to continue the hearing to a date certain, public comment will be take on the continuance only, and full presentations and discussion will be made at the future hearing.

Name: Diamond Heights Community Association

(Check one)
☒ Appellant ☐ Project Sponsor
☐ Other _____ ☐ Department _____

Project Address: 350 Amber Drive, San Francisco, CA (Assessor's Parcel Block No. 7521, Lot No. 005)

Date of Scheduled Appeal Hearing: Tuesday, December 9, 2025
Pursuant to Planning Code, Section 308.1(f), I request a continuance of the appeal hearing for above-mentioned proposed project for these suggested dates: February 3, 10, 17, or 24, 2026

If the hearing is requested to be continued past the 90-day deadline for a Board decision on this appeal, pursuant to Planning Code, Section 308.1, **all parties** (Appellant(s) and Project Sponsor(s)) must agree to waive the required hearing/action deadlines around this Conditional Use appeal.

☒ **I agree to waive the required around this Conditional Use appeal.**

☐ **I do not agree to waive the required around this Conditional Use appeal.**

Additional Comments: 1) Appellant requests that the CUA appeal be continued to a future public hearing, but only if it may be heard on the same day and same time as Appellant's Appeal of the Project's CEQA Exemption Determination.

2) Alternatively, Appellant requests a reasonable extension of the deadline to submit additional documentation and written materials for consideration by members of the Board beyond noon on Wednesday, November 26, 2025.

Signature: _____ Date: December 3, 2025

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TDD/TTY No. (415) 554-5227

Request for Continuance - Conditional Use Appeal Hearing

Continuance requests are contingent upon approval by the Board of Supervisors. On the day of the appeal hearing, if a motion is entertained to continue the hearing to a date certain, public comment will be take on the continuance only, and full presentations and discussion will be made at the future hearing.

Name: AT&T

(Check one)
☐ Appellant ☒ Project Sponsor
☐ Other _____ ☐ Department _____

Project Address: 350 Amber Drive

Date of Scheduled Appeal Hearing:
Pursuant to Planning Code, Section 308.1(f), I request a continuance of the appeal hearing for above-mentioned proposed project for these suggested dates: Feb. 10 or Feb 24, 2026

If the hearing is requested to be continued past the 90-day deadline for a Board decision on this appeal, pursuant to Planning Code, Section 308.1, **all parties** (Appellant(s) and Project Sponsor(s)) must agree to waive the required hearing/action deadlines around this Conditional Use appeal.

☒ **I agree to waive the required around this Conditional Use appeal.**

☐ **I do not agree to waive the required around this Conditional Use appeal.**

Additional Comments: _____

Signature: _____ Date: 12/4/2025

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; timwolfred@aol.com; "dhcasf@gmail.com"; "lentzplanning@gmail.com"
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); RUIZ-ESQUIDE, ANDREA (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	HEARING NOTICE: Appeal of CEQA Determination of Exemption and Conditional Use Authorization - Proposed 350 Amber Drive Project - Appeal Hearing Date: December 9, 2025
Date:	Tuesday, November 25, 2025 12:37:01 PM
Attachments:	image001.png

Greetings,

The Office of the Clerk of the Board has scheduled a hearing for Special Order before the Board of Supervisors on **December 9, 2025**, at 3:00 p.m. for the appeal of the CEQA Determination of Exemption and Conditional Use Authorization for the proposed project at 350 Amber Drive.

Please find the following link to the hearing notice for the matter:

Public Hearing Notice - November 25, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251094 - CEQA Appeal
Board of Supervisors File No. 251098 - CU Appeal

Regards,

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T 415-554-7718 | F 415-554-5163
lisa.lew@sfgov.org | www.sfbos.org

(VIRTUAL APPOINTMENTS) To schedule a "virtual" meeting with me (on Microsoft Teams), please ask and I can answer your questions in real time.

Click here to complete a Board of Supervisors Customer Service Satisfaction form

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public documents that members of the public may inspect or copy.

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Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

NOTICE OF PUBLIC HEARING

BOARD OF SUPERVISORS OF THE CITY AND COUNTY OF SAN FRANCISCO
Sent via Email and/or U.S. Postal Service

NOTICE IS HEREBY GIVEN THAT the Board of Supervisors of the City and County of San Francisco will hold a public hearing to consider the following appeal and said public hearing will be held as follows, at which time all interested parties may attend and be heard.

Date: **Tuesday, December 9, 2025**

Time: **3:00 p.m.**

Location: **Legislative Chamber, Room 250, located at City Hall**
1 Dr. Carlton B. Goodlett Place, San Francisco, CA

Subject: **File No. 251094.** Hearing of persons interested in or objecting to the determination of exemption from environmental review under the California Environmental Quality Act issued as a Categorical Exemption by the Planning Department on May 29, 2025, for the proposed project at 350 Amber Drive, Assessor's Parcel Block No. 7521, Lot No. 005, which proposes to install a new AT&T Macro Wireless Telecommunications Facility on an approximately 104 foot tall monopole, consisting of 12 new antennas, and nine new remote radio units and ancillary equipment within the P (Public) Zoning District and OS Height and Bulk District. (District 8) (Appellant: Mitchell M. Tsai of Mitchell M. Tsai Law Firm on behalf of the Diamond Heights Community Association) (Filed October 27, 2025)

File No. 251098. Hearing of persons interested in or objecting to the approval of a Conditional Use Authorization pursuant to Planning Code, Sections 209.2, 303, and 304 for a proposed project at 350 Amber Drive (Assessor's Parcel Block No. 7521, Lot No. 005) identified in Planning Case No. 2024-004318CUA, issued by the Planning Commission by Motion No. 21825, dated September 25, 2025, to install a new AT&T Macro Wireless Telecommunications Facility on an approximately 104 foot tall monopole, consisting of 12 new antennas, and nine new remote radio units and ancillary equipment within the P (Public) Zoning District and OS Height and Bulk District. (District 8) (Appellant: Mitchell M. Tsai of Mitchell M. Tsai Law Firm on behalf of the Diamond Heights Community Association) (Filed October 27, 2025)

DATED ~ MAILED ~ EMAILED ~ POSTED: November 25, 2025

In accordance with Administrative Code, Section 67.7-1, persons who are unable to attend the hearing on this matter may submit written comments. These comments will be added to the official public record in this matter and shall be brought to the attention of the Board of Supervisors. Written comments should be addressed to Angela Calvillo, Clerk of the Board, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA, 94102 or sent via email (bos.@sfgov.org). Information relating to this matter is available in the Office of the Clerk of the Board or the Board of Supervisors' Legislative Research Center (https://sfbos.org/legislative-research-center-lrc). Agenda information relating to this matter will be available for public review on Friday, December 5, 2025.

For any questions about this hearing, please contact our office at bos.legislation@sfgov.org or call (415) 554-5184.

Angela Calvillo
Clerk of the Board of Supervisors
City and County of San Francisco

jw:ll:ak:

DATED ~ MAILED ~ EMAILED ~ POSTED: November 25, 2025

BOARD of SUPERVISORS

City Hall
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

PROOF OF MAILING

Legislative File No. File Nos. 251094 and 251098

Description of Items: Hearing - Determination of Exemption From Environmental Review - Appeal of Conditional Use Authorization Approval - 350 Amber Drive - 611 Notices Mailed

I, Lisa Lew , an employee of the City and County of San Francisco, mailed the above described document(s) by depositing the sealed items with the United States Postal Service (USPS) with the postage fully prepaid as follows:

Date: November 25, 2025

Time: 2:00 p.m.

USPS Location: Repro Pick-up Box in the Clerk of the Board's Office (Rm 244)

Mailbox/Mailslot Pick-Up Times (if applicable): N/A

Signature: Lisa Lew

Instructions: Upon completion, original must be filed in the above referenced file.

From:	BOS Legislation, (BOS)
To:	Liu, Bella (CPC); Yeung, Tony (CPC); Chen, Theodore (CPC); Jiang, Biling (CPC); Tso, Jonathan (CPC)
Cc:	BOS-Operations; BOS Legislation, (BOS)
Subject:	APPEAL FEE PICKUP: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project - Appeal Hearing Date: December 9, 2025
Date:	Tuesday, November 25, 2025 12:03:29 PM
Attachments:	Appeal Fee Waiver 102425.pdf Appeal Check Pickup - CU.doc

---

Greetings,

We have an appeal check for pick up for the listed appeal project, ready to be picked up at the Clerk's Office, Monday through Friday from 8:00 a.m. to 5:00 p.m. A fee waiver has been filed for this appeal (attached.)

Ops,
The checks should be in your possession currently. Please have Planning sign the attached pick up form and scan it to leg clerks when completed. Thank you.

Jocelyn Wong
Legislative Clerk
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T: 415.554.7702 | F: 415.554.5163
jocelyn.wong@sfgov.org | www.sfbos.org

(VIRTUAL APPOINTMENTS) To schedule a "virtual" meeting with me (on Microsoft Teams), please ask and I can answer your questions in real time.

Click **HERE** to complete a Board of Supervisors Customer Service Satisfaction form.

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From: BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Sent: Tuesday, November 25, 2025 11:59 AM
To: 'info@mitchtsailaw.com' <info@mitchtsailaw.com>; 'dhcasf@gmail.com' <dhcasf@gmail.com>; 'lentzplanning@gmail.com' <lentzplanning@gmail.com>
Cc: RUSSI, BRAD (CAT) <Brad.Russi@sfcityatty.org>; JENSEN, KRISTEN (CAT) <Kristen.Jensen@sfcityatty.org>; YANG, AUSTIN (CAT) <Austin.Yang@sfcityatty.org>; Dennis Phillips, Sarah (CPC) <sarah.dennis-phillips@sfgov.org>; Gibson, Lisa (CPC) <lisa.gibson@sfgov.org>; Dwyer, Debra (CPC) <debra.dwyer@sfgov.org>; Navarrete, Joy (CPC) <joy.navarrete@sfgov.org>; Lewis, Don (CPC) <don.lewis@sfgov.org>; Switzky, Joshua (CPC) <joshua.switzky@sfgov.org>; Teague, Corey (CPC) <corey.teague@sfgov.org>; Tam, Tina (CPC) <tina.tam@sfgov.org>; Sider, Dan (CPC) <dan.sider@sfgov.org>; Starr, Aaron (CPC) <aaron.starr@sfgov.org>; Watty, Elizabeth (CPC) <elizabeth.watty@sfgov.org>; Ionin, Jonas (CPC) <jonas.ionin@sfgov.org>; Livia, Diane (CPC) <diane.livia@sfgov.org>; Dacey, John (CPC) <John.Dacey@sfgov.org>; Pollak, Josh (CPC) <josh.pollak@sfgov.org>; Lamarre, Julie (BOA) <julie.lamarre@sfgov.org>; Longaway, Alec (BOA) <alec.longaway@sfgov.org>; BOS-Supervisors <bos-supervisors@sfgov.org>; BOS-Legislative Aides <bos-legislative_aides@sfgov.org>; Calvillo, Angela (BOS) <angela.calvillo@sfgov.org>; Somera, Alisa (BOS) <alisa.somera@sfgov.org>; Mchugh, Eileen (BOS) <eileen.e.mchugh@sfgov.org>; BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Subject: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project - Appeal Hearing Date: December 9, 2025

Greetings,

The Office of the Clerk of the Board has scheduled a hearing for Special Order before the Board of Supervisors on **December 9, 2025**, at 3:00 p.m. Please find linked below an appeal letter regarding the proposed 350 Amber Drive project, as well as direct links to the Public Works' second updated determination, and an informational letter from the Clerk of the Board. The appeal of the Conditional Use Authorization is filed by Mitchell M. Tsai of Mitchell M. Tsai Law Firm on behalf of the Diamond Heights Community Association.

Appeal Letter - October 27, 2025
Public Works Second Updated Determination - November 24, 2025
Clerk of the Board Hearing Notification Letter - November 25, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251098 - CU Appeal

Jocelyn Wong
Legislative Clerk
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102

T: 415.554.7702 | F: 415.554.5163
jocelyn.wong@sfgov.org | www.sfbos.org

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November 25, 2025

File Nos. 251098; 251059-251061
Planning Case No. 2024-004318CUA

Received from the Board of Supervisors Clerk's Office one check, one in the amount of Seven Hundred Eighty Seven Dollars ($787) the filing fee paid by Diamond Heights Community Association for the appeal of the Conditional Use Authorization for the proposed 350 Amber Drive project:

Planning Department By:

Tony Yeung
Print Name

11/25/25
Signature and Date

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; "dhcasf@gmail.com"; "lentzplanning@gmail.com"
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Dwyer, Debra (CPC); Navarrete, Joy (CPC); Lewis, Don (CPC); Switzky, Joshua (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Livia, Diane (CPC); Dacey, John (CPC); Pollak, Josh (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project - Appeal Hearing Date: December 9, 2025
Date:	Tuesday, November 25, 2025 11:59:00 AM

Greetings,

The Office of the Clerk of the Board has scheduled a hearing for Special Order before the Board of Supervisors on **December 9, 2025**, at 3:00 p.m. Please find linked below an appeal letter regarding the proposed 350 Amber Drive project, as well as direct links to the Public Works' second updated determination, and an informational letter from the Clerk of the Board. The appeal of the Conditional Use Authorization is filed by Mitchell M. Tsai of Mitchell M. Tsai Law Firm on behalf of the Diamond Heights Community Association.

Appeal Letter - October 27, 2025
Public Works Second Updated Determination - November 24, 2025
Clerk of the Board Hearing Notification Letter - November 25, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251098 - CU Appeal

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Legislative Clerk
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T: 415.554.7702 | F: 415.554.5163
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information provided will not be redacted. Members of the public are not required to provide personal identifying information when they communicate with the Board of Supervisors and its committees. All written or oral communications that members of the public submit to the Clerk's Office regarding pending legislation or hearings will be made available to all members of the public for inspection and copying. The Clerk's Office does not redact any information from these submissions. This means that personal information—including names, phone numbers, addresses and similar information that a member of the public elects to submit to the Board and its committees—may appear on the Board of Supervisors website or in other public documents that members of the public may inspect or copy.

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Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

November 25, 2025

Mitchell M. Tsai
Mitchell M. Tsai Law Firm
139 S. Hudson Avenue, Suite 200
Pasadena, CA 91101

Subject: **File No. 251098 - Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project**

Dear Mr. Tsai:

The Office of the Clerk of the Board is in receipt of a second updated response letter dated November 24, 2025, from City and County Surveyor of Public Works for the proposed 350 Amber Drive project.

Pursuant to Planning Code, Section 308.1, a hearing date has been scheduled for **Tuesday, December 9, 2025, at 3:00 p.m.**, at the Board of Supervisors meeting.

If there is supporting documentation you wish to include for the hearing, please email an electronic copy by Wednesday, December 3, 2025, at noon to bos.legislation@sfgov.org. Any materials received after this date, will still be distributed to all parties and be included as part of the official file

For the above, the Clerk's office requests electronic files be sent to bos.legislation@sfgov.org.

Please feel free to contact our office at bos.legislation@sfgov.org or call (415) 554-5184 if you have any questions.

Very truly yours,

Angela Calvillo
Clerk of the Board

jw:ll:ak:

c: Brad Russi, Deputy City Attorney
Kristen Jensen, Deputy City Attorney
Austin Yang, Deputy City Attorney
Elias French, City and County Surveyor, Public Works
Ian Schneider, Government Affairs Liaison, Public Works
Bernie Tse, Public Works
Nicolas Huff, Public Works
Jason Wong, Survey Assistant II, Public Works
Sarah Dennis Phillips, Planning Director, Planning Department
Lisa Gibson, Environmental Review Officer, Planning Department
Debra Dwyer, Principal Environmental Planner, Planning Department
Joy Navarrete, Environmental Planning, Planning Department
Don Lewis, Environmental Planning, Planning Department
Josh Switzky, Acting Director of Citywide Planning, Planning Department
Corey Teague, Zoning Administrator, Planning Department
Tina Tam, Deputy Zoning Administrator, Planning Department
Dan Sider, Director of Executive Programs, Planning Department
Aaron Starr, Manager of Legislative Affairs, Planning Department
Elizabeth Watty, Current Planning Division, Planning Department
Jonas Ionin, Planning Commission Secretary, Planning Department
Diane Livia, Staff Contact, Planning Department
John Dacey, Staff Contact, Planning Department
Josh Pollack, Staff Contact, Planning Department
Julie Lamarre, Executive Director, Board of Appeals
Alec Longaway, Legal Process Clerk, Board of Appeals

Office of the City and County Surveyor | Project Delivery: Bureau of Surveying & Mapping
T. 628.271.2000 | 49 South Van Ness Ave. Suite 9th Floor, San Francisco, CA 94103

November 24, 2025

Ms. Angela Calvillo
Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall – Room 244
San Francisco, CA 94102

RE: Second Updated Response Letter
Planning Case No. 2024-004318CUA
350 Amber Drive – Conditional Use Authorization Appeal
AB 7521 LOT 005

Dear Ms. Calvillo:

This letter is a Second Updated Response to your October 29, 2025 request to the Office of the City and County Surveyor for verification of signatures with respect to the above appeal.

In our initial response letter dated October 31, 2025 we found that the verified appellant's signatures represented 16.92% of the area, less than the required 20% of the area as defined in Sec. 308.1 of the San Francisco Planning Code and therefore did not meet the threshold for an appeal.

As we pointed out in our updated response letter dated November 18, 2025, the reason for this calculation was that the signatories did not state whether they were owners or tenants as is usual in form column three, so we were only able to verify owner's names using the Assessor Recorder records, and not those of any tenants as it was not stated which signatories were tenants. Therefore we only included verified owner's names in this initial calculation.

However, as we pointed out in said letter dated November 18, 2025, if the names of all other signatories that were not verified owners or otherwise dis-included for other reasons per said Sec. 308.1 are taken to be verified tenants pursuant to the declaration on the Appeal Letter that the signatories are owners or verified tenants, the calculated area represented by appellants signatures is 20.36% and does meet the threshold for appeal.

As this situation was novel to us we provided our earlier updated response dated November 18, 2025 in order to provide a complete report on our verification of signatures and calculation of area, and deferred to the Clerk of the Board on whether the signature list met the threshold for an appeal Under Sec. 308.1 of the San Francisco Planning Code.

However, we understand from your Memorandum to our office sent November 21, 2025 that Planning Code Sec. 308.1 requires our office to make this determination. Therefore, we have reviewed again the calculations, signature list, Planning Code, and points made in a procedural objection received from the appellant Daniel Schereck on November 21, 2025.

Based on this latest review, it is our office's conclusion that the submitted signature list, considered in light of the declaration made on the list that all signatories are owners or verified tenants, constitutes 20.36% of the calculated area and therefore does meet the threshold for appeal.

Sincerely,

Elias French
City & County Surveyor

Office of the City and County Surveyor | Project Delivery: Bureau of Surveying & Mapping
T. 628.271.2000 | 49 South Van Ness Ave. Suite 9th Floor, San Francisco, CA 94103

November 18, 2025

Ms. Angela Calvillo
Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall – Room 244
San Francisco, CA 94102

RE: Updated Response Letter
Planning Case No. 2024-004318CUA
350 Amber Drive – Conditional Use Authorization Appeal
AB 7521 LOT 005

Dear Ms. Calvillo:

This letter is in an Updated Response to your October 29, 2025, request for the Office of the City and County Surveyor for verification of signatures with respect to the above appeal.

As noted in our original response letter dated October 31, 2025 we found that the verified appellant's signatures represented 16.92% of the area, less than the required 20% of the area as defined in SEC. 308.1 of the San Francisco Planning Code and therefore did not meet the threshold for an appeal.

We want to point out now that since the signatories did not state whether they were owners or tenants as is usual in form column 3, we were only able to verify owner's names using the Assessor Recorder records, and not those of any tenants as it was not stated which signatories were tenants. Therefore we only included verified owner's names in the calculation above.

If the names of all other signatories that were not verified owners or otherwise dis-included for other reasons per said Sec. 308.1 are taken to be verified tenants, the calculated area represented by appellants signatures is 20.36% and does meet the threshold for appeal.

As this situation is novel to us and Planning Code Sec. 308.1 does not provide specific guidance on how to proceed, we provide this Updated Response to provide a complete report on our verification of signatures and calculation of areas. We defer to the Clerk of the Board on whether this submitted signature list meets the threshold for an appeal Under Sec. 308.1 of the San Francisco Planning Code.

Sincerely,

Elias French
City & County Surveyor

Office of the City and County Surveyor | Project Delivery: Bureau of Surveying & Mapping
T. 628.271.2000 | 49 South Van Ness Ave. Suite 9th Floor, San Francisco, CA 94103

October 31, 2025

Ms. Angela Calvillo
Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall – Room 244
San Francisco, CA 94102

RE: Planning Case No. 2024-004318CUA
350 Amber Drive – Conditional Use Authorization Appeal
AB 7521 LOT 005

Dear Ms. Calvillo:

This letter is in response to your October 29, 2025, request for the Office of the City and County Surveyor to review for verification of signatures with respect to the above referenced appeal. We were able to verify the property owners through the Assessor Recorder's records.

Please be advised that per our calculations the total appellant's signature represent 16.92% of the area, which is less than 20% of the area, as defined in SEC. 308.1 of the San Francisco Planning Code and therefore does not meet the threshold for an appeal.

Sincerely,

Elias W. French
City & County Surveyor

From:	BOS Legislation, (BOS)
To:	French, Elias (DPW)
Cc:	Tse, Bernie (DPW); Huff, Nicolas (DPW); Wong, Jason (DPW); Schneider, Ian (DPW); RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); Gibson, Lisa (CPC); Navarrete, Joy (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Switzky, Joshua (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Dacey, John (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project
Date:	Wednesday, October 29, 2025 3:43:30 PM
Attachments:	CUA Appeal Ltr 102725.pdf image001.png COB Ltr 102825 CU Det.pdf

---

Dear Mr. French

The Office of the Clerk of the Board is in receipt of an appeal of the Conditional Use Authorization for the proposed project at 350 Amber Drive. The appeal was filed by Daniel Schereck, on behalf of the Diamond Heights Community Association,.

Please find attached the appeal filing packet with signatures, and a letter requesting verification of signatures submitted with the appeal filing.

Kindly review for verification of signatures and submit your determination no later than 5:00 p.m. on Wednesday, November 5, 2025. Thank you.

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T 415-554-7718 | F 415-554-5163
lisa.lew@sfgov.org | www.sfbos.org

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BOARD of SUPERVISORS

City Hall
1 Dr. Carlton B. Goodlett Place
Room 244
San Francisco, CA 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

October 29, 2025

Elias French
City and County Surveyor, Public Works
49 South Van Ness Avenue, Suite 300
San Francisco, CA 94103

Planning Case No. 2024-004318CUA
350 Amber Drive - Conditional Use Authorization Appeal

Dear Mr. French:

The Office of the Clerk of the Board is in receipt of an appeal filed by Daniel Schereck, on behalf of the Diamond Heights Community Association, from the decision of the Planning Commission on 350 Amber Drive, to approve a Conditional Use Authorization (CUA) per Planning Commission Motion No. 21825 to install a new AT&T Macro Wireless Telecommunications Facility on an approximately 104 foot tall monopole, consisting of 12 new antennas, and 9 new remote radio units and ancillary equipment within the P (Public) Zoning District and OS Height and Bulk District. The proposed project is located at:

350 Amber Drive
Assessor's Parcel Block No. 7521, Lot No. 005

By copy of this letter, the City and County Surveyor is requested to determine the sufficiency of the signatures in regard to the percentage of the area represented by the appellant. Please submit your determination no later than 5:00 p.m. on Wednesday, November 5, 2025.

Sincerely,

Angela Calvillo
Clerk of the Board

Jw:ak:ll:arns

c: Bernie Tse, Public Works
Nicolas Huff, Public Works
Jason Wong, Public Works
Ian Schneider, Public Works
Brad Russi, Deputy City Attorney
Kristen Jensen, Deputy City Attorney
Austin Yang, Deputy City Attorney
Lisa Gibson, Planning Department
Joy Navarrete, Planning Department
Corey Teague, Planning Department
Tina Tam, Planning Department
Josh Switzky, Planning Department
Dan Sider, Planning Department
Aaron Starr, Planning Department
Elizabeth Watty, Planning Department
Jonas Ionin, Planning Commission
John Dacey, Planning Department
Julie Lamarre, Board of Appeals
Alec Longaway, Board of Appeals

From:	French, Elias (DPW)
To:	BOS Legislation, (BOS)
Cc:	Tse, Bernie (DPW); Huff, Nicolas (DPW); Wong, Jason (DPW); Schneider, Ian (DPW); RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); Gibson, Lisa (CPC); Navarrete, Joy (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Switzky, Joshua (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Dacey, John (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS)
Subject:	RE: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project
Date:	Wednesday, October 29, 2025 3:44:53 PM
Attachments:	image001.png

Thank You,

We will perform the verification and report back once completed.

Sincerely,

Elias W. French, PLS
City & County Surveyor

Bureau of Surveying & Mapping | San Francisco Public Works
49 South Van Ness Avenue, 9th Floor | San Francisco, CA 94103
elias.french@sfdpw.org | 628-271-2124

From: BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Sent: Wednesday, October 29, 2025 3:43 PM
To: French, Elias (DPW) <elias.french@sfdpw.org>
Cc: Tse, Bernie (DPW) <bernie.tse@sfdpw.org>; Huff, Nicolas (DPW) <nicolas.huff@sfdpw.org>; Wong, Jason (DPW) <jason.c.wong1@sfdpw.org>; Schneider, Ian (DPW) <ian.schneider@sfdpw.org>; RUSSI, BRAD (CAT) <Brad.Russi@sfcityatty.org>; JENSEN, KRISTEN (CAT) <Kristen.Jensen@sfcityatty.org>; YANG, AUSTIN (CAT) <Austin.Yang@sfcityatty.org>; Gibson, Lisa (CPC) <lisa.gibson@sfgov.org>; Navarrete, Joy (CPC) <joy.navarrete@sfgov.org>; Teague, Corey (CPC) <corey.teague@sfgov.org>; Tam, Tina (CPC) <tina.tam@sfgov.org>; Switzky, Joshua (CPC) <joshua.switzky@sfgov.org>; Sider, Dan (CPC) <dan.sider@sfgov.org>; Starr, Aaron (CPC) <aaron.starr@sfgov.org>; Watty, Elizabeth (CPC) <elizabeth.watty@sfgov.org>; Ionin, Jonas (CPC) <jonas.ionin@sfgov.org>; Dacey, John (CPC) <John.Dacey@sfgov.org>; Lamarre, Julie (BOA) <julie.lamarre@sfgov.org>; Longaway, Alec (BOA) <alec.longaway@sfgov.org>; BOS-Supervisors <bos-supervisors@sfgov.org>; BOS-Legislative Aides <bos-legislative_aides@sfgov.org>; Calvillo, Angela (BOS) <angela.calvillo@sfgov.org>; Somera, Alisa (BOS) <alisa.somera@sfgov.org>; Mchugh, Eileen (BOS) <eileen.e.mchugh@sfgov.org>; BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Subject: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project

Dear Mr. French

The Office of the Clerk of the Board is in receipt of an appeal of the Conditional Use Authorization for

the proposed project at 350 Amber Drive. The appeal was filed by Daniel Schereck, on behalf of the Diamond Heights Community Association,.

Please find attached the appeal filing packet with signatures, and a letter requesting verification of signatures submitted with the appeal filing.

Kindly review for verification of signatures and submit your determination no later than 5:00 p.m. on Wednesday, November 5, 2025. Thank you.

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T 415-554-7718 | F 415-554-5163
lisa.lew@sfgov.org | www.sfbos.org

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From:	Wong, Jason (DPW)
To:	BOS Legislation, (BOS); French, Elias (DPW)
Cc:	Tse, Bernie (DPW); Huff, Nicolas (DPW); Schneider, Ian (DPW); RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); Gibson, Lisa (CPC); Navarrete, Joy (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Switzky, Joshua (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Dacey, John (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS)
Subject:	RE: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project
Date:	Wednesday, November 5, 2025 4:28:33 PM
Attachments:	350 Amber_Memo.pdf image004.png

Hello BOS Legislation

Attached is the signed verification of signature for the this CU Appeal.

Best,

Jason Wong

Survey Assistant II

Bureau of Surveying & Mapping | San Francisco Public Works | City and County of San Francisco

49 S Van Ness Avenue, Suite 900 | San Francisco, CA 94103 | (628) 271 - 2646

From: BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Sent: Wednesday, November 5, 2025 4:07 PM
To: French, Elias (DPW) <elias.french@sfdpw.org>
Cc: Tse, Bernie (DPW) <bernie.tse@sfdpw.org>; Huff, Nicolas (DPW) <nicolas.huff@sfdpw.org>; Wong, Jason (DPW) <jason.c.wong1@sfdpw.org>; Schneider, Ian (DPW) <ian.schneider@sfdpw.org>; RUSSI, BRAD (CAT) <Brad.Russi@sfcityatty.org>; JENSEN, KRISTEN (CAT) <Kristen.Jensen@sfcityatty.org>; YANG, AUSTIN (CAT) <Austin.Yang@sfcityatty.org>; Gibson, Lisa (CPC) <lisa.gibson@sfgov.org>; Navarrete, Joy (CPC) <joy.navarrete@sfgov.org>; Teague, Corey (CPC) <corey.teague@sfgov.org>; Tam, Tina (CPC) <tina.tam@sfgov.org>; Switzky, Joshua (CPC) <joshua.switzky@sfgov.org>; Sider, Dan (CPC) <dan.sider@sfgov.org>; Starr, Aaron (CPC) <aaron.starr@sfgov.org>; Watty, Elizabeth (CPC) <elizabeth.watty@sfgov.org>; Ionin, Jonas (CPC) <jonas.ionin@sfgov.org>; Dacey, John (CPC) <John.Dacey@sfgov.org>; Lamarre, Julie (BOA) <julie.lamarre@sfgov.org>; Longaway, Alec (BOA) <alec.longaway@sfgov.org>; BOS-Supervisors <bos-supervisors@sfgov.org>; BOS-Legislative Aides <bos-legislative_aides@sfgov.org>; Calvillo, Angela (BOS) <angela.calvillo@sfgov.org>; Somera, Alisa (BOS) <alisa.somera@sfgov.org>; Mchugh, Eileen (BOS) <eileen.e.mchugh@sfgov.org>; BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Subject: RE: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project

Hello,

This is a friendly reminder that the signature sufficiency determination for the below proposed CU appeal filing is due by the end of today. Thank you for your attention to this matter.

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244

San Francisco, CA 94102
T 415-554-7718 | F 415-554-5163
lisa.lew@sfgov.org | www.sfbos.org

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From: BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Sent: Wednesday, October 29, 2025 3:43 PM
To: French, Elias (DPW) <elias.french@sfdpw.org>
Cc: Tse, Bernie (DPW) <bernie.tse@sfdpw.org>; Huff, Nicolas (DPW) <nicolas.huff@sfdpw.org>; Wong, Jason (DPW) <jason.c.wong1@sfdpw.org>; Schneider, Ian (DPW) <ian.schneider@sfdpw.org>; RUSSI, BRAD (CAT) <Brad.Russi@sfcityatty.org>; JENSEN, KRISTEN (CAT) <Kristen.Jensen@sfcityatty.org>; YANG, AUSTIN (CAT) <Austin.Yang@sfcityatty.org>; Gibson, Lisa (CPC) <lisa.gibson@sfgov.org>; Navarrete, Joy (CPC) <joy.navarrete@sfgov.org>; Teague, Corey (CPC) <corey.teague@sfgov.org>; Tam, Tina (CPC) <tina.tam@sfgov.org>; Switzky, Joshua (CPC) <joshua.switzky@sfgov.org>; Sider, Dan (CPC) <dan.sider@sfgov.org>; Starr, Aaron (CPC) <aaron.starr@sfgov.org>; Watty, Elizabeth (CPC) <elizabeth.watty@sfgov.org>; Ionin, Jonas (CPC) <jonas.ionin@sfgov.org>; Dacey, John (CPC) <John.Dacey@sfgov.org>; Lamarre, Julie (BOA) <julie.lamarre@sfgov.org>; Longaway, Alec (BOA) <alec.longaway@sfgov.org>; BOS-Supervisors <bos-supervisors@sfgov.org>; BOS-Legislative Aides <bos-legislative_aides@sfgov.org>; Calvillo, Angela (BOS) <angela.calvillo@sfgov.org>; Somera, Alisa (BOS) <alisa.somera@sfgov.org>; Mchugh, Eileen (BOS) <eileen.e.mchugh@sfgov.org>; BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Subject: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project

Dear Mr. French

The Office of the Clerk of the Board is in receipt of an appeal of the Conditional Use Authorization for the proposed project at 350 Amber Drive. The appeal was filed by Daniel Schereck, on behalf of the Diamond Heights Community Association,.

Please find attached the appeal filing packet with signatures, and a letter requesting verification of signatures submitted with the appeal filing.

Kindly review for verification of signatures and submit your determination no later than 5:00 p.m. on

Wednesday, November 5, 2025. Thank you.

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
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Office of the City and County Surveyor | Project Delivery: Bureau of Surveying & Mapping
T. 628.271.2000 | 49 South Van Ness Ave. Suite 9th Floor, San Francisco, CA 94103

October 31, 2025

Ms. Angela Calvillo
Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall – Room 244
San Francisco, CA 94102

RE: Planning Case No. 2024-004318CUA
350 Amber Drive – Conditional Use Authorization Appeal
AB 7521 LOT 005

Dear Ms. Calvillo:

This letter is in response to your October 29, 2025, request for the Office of the City and County Surveyor to review for verification of signatures with respect to the above referenced appeal. We were able to verify the property owners through the Assessor Recorder's records.

Please be advised that per our calculations the total appellant's signature represent 16.92% of the area, which is less than 20% of the area, as defined in SEC. 308.1 of the San Francisco Planning Code and therefore does not meet the threshold for an appeal.

Sincerely,

Elias W. French
City & County Surveyor

From:	BOS Legislation, (BOS)
To:	"info@mitchtsailaw.com"; "dhcasf@gmail.com"
Cc:	RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); French, Elias (DPW); Schneider, Ian (DPW); Tse, Bernie (DPW); Huff, Nicolas (DPW); Wong, Jason (DPW); Dennis Phillips, Sarah (CPC); Gibson, Lisa (CPC); Navarrete, Joy (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Switzky, Joshua (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Dacey, John (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); BOS-Supervisors; BOS-Legislative Aides; Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project
Date:	Friday, November 7, 2025 4:33:00 PM
Attachments:	image001.png

Greetings,

The Office of the Clerk of the Board received an appeal filing of the Conditional Use Authorization for the proposed project at 350 Amber Drive, filed by Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association. The appeal filing does not meet the requirements of Planning Code, Section 308.1. The Board of Supervisors is not empowered to hear the matter, and the appeal letter will be filed with our office in File No. 251098.

Please find linked below the letter of appeal, a letter from the City and County Surveyor regarding the appeal filing signatures, as well as an informational letter from the Clerk of the Board. Our office has sent a hard copy of the letter and the filing check to the Diamond Heights Community Association.

Appeal Letter - October 27, 2025
Public Work's Letter - October 31, 2025
Clerk of the Board Letter - November 6, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251098

Best regards,

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T 415-554-7718 | F 415-554-5163
lisa.lew@sfgov.org | www.sfbos.org

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BOARD of SUPERVISORS

City Hall
1 Dr. Carlton B. Goodlett Place
Room 244
San Francisco, CA 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

November 6, 2025

Mitchell M. Tsai
Mitchell M. Tsai Law Firm
139 S. Hudson Avenue, Suite 200
Pasadena, CA 91101

Subject: **File No. 251098 - Appeal of Conditional Use Authorization**
Proposed Project at 350 Amber Drive

Dear Mr. Tsai:

The Office of the Clerk of the Board is in receipt of a letter dated October 31, 2025, from the City and County Surveyor (attached) determining the signatures received *did not* meet the threshold for appeal.

Pursuant to the appeal filing guidelines of Planning Code, Section 308.1(b), the notice of appeal shall be subscribed by either the owners of at least 20% of the property affected by the proposed conditional use or five members of the Board of Supervisors. The City and County Surveyor has determined that the appeal signatures you submitted only represent 16.92% of the area within 300 feet of the project seeking conditional use authorization.

The appeal filing period closed at the end of the business day on Monday, October 27, 2025, and we are unable to accept any additional signatures for consideration in this filing. Therefore, the Board of Supervisors is not empowered to hear this appeal, as it does not meet the filing requirements of Planning Code, Section 308.1. Please feel free to contact our office at bos.legislation@sfgov.org or call (415) 554-5184 if you have any questions.

Sincerely,

Angela Calvillo
Clerk of the Board

jw:ll:ams

c: Elias French, Public Works
Bernie Tse, Public Works
Nicolas Huff, Public Works
Jason Wong, Public Works
Ian Schneider, Public Works
Brad Russi, Deputy City Attorney
Kristen Jensen, Deputy City Attorney
Austin Yang, Deputy City Attorney
Lisa Gibson, Planning Department
Joy Navarrete, Planning Department
Corey Teague, Planning Department
Tina Tam, Planning Department
Josh Switzky, Planning Department
Dan Sider, Planning Department
Aaron Starr, Planning Department
Elizabeth Watty, Planning Department
Jonas Ionin, Planning Commission
John Dacey, Planning Department
Julie Lamarre, Board of Appeals
Alec Longaway, Board of Appeals

From:	Wong, Jason (DPW)
To:	dhcasf@gmail.com
Cc:	BOS-Operations; BOS Legislation, (BOS); French, Elias (DPW); Ng, Wilson (BOS)
Subject:	RE: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project
Date:	Wednesday, November 19, 2025 8:17:34 PM
Attachments:	Data Set_350 Amber_20251119.xlsx 350 Amber_Memo Updated 2025-11-18.pdf image004.png

---

Hello Daniel,

The calculations and CAD file was sent over via the Sunshine Request 25-8857 that you have requested. The attached documents were created post Sunshine Request.

As for your bullet points below I have copy and pasted them in this email. My responses are in Blue.

- The complete list of addresses from which signatures of "verified tenants" could have been collected within the maximum required area around 350 Amber Drive,
  This request cannot be answered as there is no public record of all addresses of potential “verified tenants”; our analysis is based on assessor’s parcel numbers and associated lot areas.
- How much "area", and the % of the "area", that each address comprises of the entire maximum area of all addresses combined that is possible,
  The area of each address is found in the CAD file from the Sunshine Request, and the maximum area of all addresses calculated from them is there as well.
- Specific reasons for approval or disapproval of each signature received.
  The reasons for disapproval are listed in Column J of the excel sheet from the Sunshine Request.
- For each address that we could have received a signature from, please identify if only one signature was needed for that address or if multiple signatures were needed. And if multiple, how many and from whom exactly?
  We did not perform research on all addresses within the 300’ radius area and so don’t have this information for all parcels in the 300’ radius area.
- The distance of each address from 350 Amber Drive.
  Please see the map in the Sunshine Request documents which shows all parcels included within 300’ of the parcel.

“The spreadsheet of addresses provided by the Planning Department for 350 Amber Drive contained many duplicates, triplicates, omissions as well as inaccuracies, so I would naturally like to compare and audit the list provided by the Planning Department to the list/data used by BOS/DPW.”

We do not use a list of addresses, but rather the 300’ Radius Map and the (Assessor Parcels within that 300’ Radius. No list is available other than the one we prepared in the Sunshine Request documents.

“Please also let me know what my options are to contest any signature decisions that I believe to be erroneous and/or to petition a recount based on inaccuracies that I may discover. “

We defer to the Clerk of the Board for details in contesting this signature calculation. In previous cases, the appellant or attorney representing the appellant has submitted their own calculations with the reasons for that calculation. In addition to their own calculations, a letter

would be sent to Public Works to contest the findings.

Please note that in response to this inquiry we undertook a full review of the signature list, verification, and calculations and have provided an updated Response Letter and spreadsheet, attached.

Thank you.

Jason Wong
Survey Assistant II
Bureau of Surveying & Mapping | San Francisco Public Works | City and County of San Francisco
49 S Van Ness Avenue, Suite 900 | San Francisco, CA 94103 | (628) 271 - 2646

From: Ng, Wilson (BOS) <wilson.l.ng@sfgov.org>
Sent: Monday, November 10, 2025 11:16 AM
To: dhcasf@gmail.com; Wong, Jason (DPW) <jason.c.wong1@sfdpw.org>
Cc: BOS-Operations <bos-operations@sfgov.org>; BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Subject: RE: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project

Dear Daniel,

On behalf of the Office of the Clerk of the Board, and as per my inquiry with our Legislative Division staff, our office will need to refer you to SFDPW, copied herein, as the custodian of the requested records/information.

Sincerely,

—
Wilson L. Ng
Deputy Director of Operations
San Francisco Board of Supervisors

1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
Web: www.sfbos.org

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addresses and similar information that a member of the public elects to submit to the Board and its committees—may appear on the Board of Supervisors website or in other public documents that members of the public may inspect or copy.

From: BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Sent: Monday, November 10, 2025 10:28 AM
To: dhcasf@gmail.com; Wong, Jason (DPW) <jason.c.wong1@sfdpw.org>; Ng, Wilson (BOS) <wilson.l.ng@sfgov.org>
Cc: BOS Legislation, (BOS) <bos.legislation@sfgov.org>
Subject: FW: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project

Hi Daniel,

Thank you for your inquiry. I am forwarding the below inquiries to the Public Works and to our Records Request division as copied here.

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T 415-554-7718 | F 415-554-5163
lisa.lew@sfgov.org | www.sfbos.org

(VIRTUAL APPOINTMENTS) To schedule a "virtual" meeting with me (on Microsoft Teams), please ask and I can answer your questions in real time.

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From: DHCA <dhcasf@gmail.com>
Sent: Monday, November 10, 2025 10:16 AM
To: BOS Legislation, (BOS) <bos.legislation@sfgov.org>; Lew, Lisa (BOS) <lisa.lew@sfgov.org>
Subject: Re: Appeal of Conditional Use Authorization - Proposed 350 Amber Drive Project

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi Lisa and the Board of Supervisors,

Thank you for providing the results of the signature appeal filing.

As the appellant, I would like to kindly request that you or your office provide the following information and documentation so that I may have insight into the process & details behind the decision:

- The complete list of addresses from which signatures of "verified tenants" could have been collected within the maximum required area around 350 Amber Drive,
- How much "area", and the % of the "area", that each address comprises of the entire maximum area of all addresses combined that is possible,
- Specific reasons for approval or disapproval of each signature received,
- For each address that we could have received a signature from, please identify if only one signature was needed for that address or if multiple signatures were needed. And if multiple, how many and from whom exactly?
- The distance of each address from 350 Amber Drive.

Please also provide any and all documentation of the process for verifying signatures on this Conditional Use appeal including the date the list was verified as accurate.

The spreadsheet of addresses provided by the Planning Department for 350 Amber Drive contained many duplicates, triplicates, omissions as well as inaccuracies, so I would naturally like to compare and audit the list provided by the Planning Department to the list/data used by BOS/DPW. Please also let me know what my options are to contest any signature decisions that I believe to be erroneous and/or to petition a recount based on inaccuracies that I may discover.

Thank you for your time and consideration,

Daniel Schereck
President, Diamond Heights Community Association
831-277-9930
dhcasf@gmail.com

On Fri, Nov 7, 2025 at 4:34 PM BOS Legislation, (BOS) <bos.legislation@sfgov.org> wrote:

> Greetings,
>
> The Office of the Clerk of the Board received an appeal filing of the Conditional Use Authorization for the proposed project at 350 Amber Drive, filed by Mitchell M. Tsai of Mitchell M. Tsai Law Firm, on behalf of the Diamond Heights Community Association. The

appeal filing does not meet the requirements of Planning Code, Section 308.1. The Board of Supervisors is not empowered to hear the matter, and the appeal letter will be filed with our office in File No. 251098.

Please find linked below the letter of appeal, a letter from the City and County Surveyor regarding the appeal filing signatures, as well as an informational letter from the Clerk of the Board. Our office has sent a hard copy of the letter and the filing check to the Diamond Heights Community Association.

Appeal Letter - October 27, 2025
Public Work's Letter - October 31, 2025
Clerk of the Board Letter - November 6, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

Board of Supervisors File No. 251098

Best regards,

Lisa Lew
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T 415-554-7718 | F 415-554-5163
lisa.lew@sfgov.org | www.sfbos.org

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Office of the City and County Surveyor | Project Delivery: Bureau of Surveying & Mapping
T. 628.271.2000 | 49 South Van Ness Ave. Suite 9th Floor, San Francisco, CA 94103

November 18, 2025

Ms. Angela Calvillo
Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall – Room 244
San Francisco, CA 94102

RE: Updated Response Letter
Planning Case No. 2024-004318CUA
350 Amber Drive – Conditional Use Authorization Appeal
AB 7521 LOT 005

Dear Ms. Calvillo:

This letter is in an Updated Response to your October 29, 2025, request for the Office of the City and County Surveyor for verification of signatures with respect to the above appeal.

As noted in our original response letter dated October 31, 2025 we found that the verified appellant's signatures represented 16.92% of the area, less than the required 20% of the area as defined in SEC. 308.1 of the San Francisco Planning Code and therefore did not meet the threshold for an appeal.

We want to point out now that since the signatories did not state whether they were owners or tenants as is usual in form column 3, we were only able to verify owner's names using the Assessor Recorder records, and not those of any tenants as it was not stated which signatories were tenants. Therefore we only included verified owner's names in the calculation above.

If the names of all other signatories that were not verified owners or otherwise dis-included for other reasons per said Sec. 308.1 are taken to be verified tenants, the calculated area represented by appellants signatures is 20.36% and does meet the threshold for appeal.

As this situation is novel to us and Planning Code Sec. 308.1 does not provide specific guidance on how to proceed, we provide this Updated Response to provide a complete report on our verification of signatures and calculation of areas. We defer to the Clerk of the Board on whether this submitted signature list meets the threshold for an appeal Under Sec. 308.1 of the San Francisco Planning Code.

Sincerely,

Elias French
City & County Surveyor

From:	BOS Legislation, (BOS)
To:	French, Elias (DPW)
Cc:	"info@mitchtsailaw.com"; "DHCA"; lentzplanning@gmail.com; Tse, Bernie (DPW); Huff, Nicolas (DPW); Wong, Jason (DPW); Schneider, Ian (DPW); RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); Gibson, Lisa (CPC); Navarrete, Joy (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Switzky, Joshua (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Dacey, John (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	COB Response - File No. 251098 - Appeal of Conditional Use Authorization Approval - 350 Amber Drive
Date:	Friday, November 21, 2025 3:54:00 PM
Attachments:	11.21.25 COB Memo - 350 Amber CU Appeal.pdf

Hello Surveyor French,

Attached please find the Clerk of the Board's response memo to your "Updated Response Letter, dated November 18, 2025.

A response is requested by Monday, November 24, 2025.

Your "Updated Response Letter" has been posted to the legislative file, along with the Clerk of the Board's attached response:

> Public Works Updated Determination – November 18, 2025
> Clerk of the Board Response – November 21, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

> Board of Supervisors File No. 251098

Jocelyn Wong
Legislative Clerk
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
T: 415.554.7702 | F: 415.554.5163
jocelyn.wong@sfgov.org | www.sfbos.org

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From:	BOS Legislation, (BOS)
To:	French, Elias (DPW)
Cc:	"info@mitchtsailaw.com"; "DHCA"; lentzplanning@gmail.com; Tse, Bernie (DPW); Huff, Nicolas (DPW); Wong, Jason (DPW); Schneider, Ian (DPW); RUSSI, BRAD (CAT); JENSEN, KRISTEN (CAT); YANG, AUSTIN (CAT); Gibson, Lisa (CPC); Navarrete, Joy (CPC); Teague, Corey (CPC); Tam, Tina (CPC); Switzky, Joshua (CPC); Sider, Dan (CPC); Starr, Aaron (CPC); Watty, Elizabeth (CPC); Ionin, Jonas (CPC); Dacey, John (CPC); Lamarre, Julie (BOA); Longaway, Alec (BOA); Calvillo, Angela (BOS); Somera, Alisa (BOS); Mchugh, Eileen (BOS); BOS Legislation, (BOS)
Subject:	COB Response - File No. 251098 - Appeal of Conditional Use Authorization Approval - 350 Amber Drive
Date:	Friday, November 21, 2025 3:54:00 PM
Attachments:	11.21.25 COB Memo - 350 Amber CU Appeal.pdf

Hello Surveyor French,

Attached please find the Clerk of the Board's response memo to your "Updated Response Letter, dated November 18, 2025.

A response is requested by Monday, November 24, 2025.

Your "Updated Response Letter" has been posted to the legislative file, along with the Clerk of the Board's attached response:

> Public Works Updated Determination – November 18, 2025
> Clerk of the Board Response – November 21, 2025

I invite you to review the entire matters on our Legislative Research Center by following the link below:

> Board of Supervisors File No. 251098

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BOARD of SUPERVISORS

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1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

MEMORANDUM

Date: November 18, 2025

To: Elias French, City and County Surveyor, Public Work

From: Angela Calvillo, Clerk of the Board

Subject: 350 Amber Drive - Conditional Use Appeal

We are in receipt of your letter dated November 18, 2025, regarding your updated response for the 350 Amber Drive Conditional Use appeal that was filed with my office on October 27, 2025.

In your updated letter, you deferred to me on whether the submitted signature list meets the threshold for an appeal under Planning Code, Section 308.1; however, I am unable to make this determination. Planning Code, Section 308.1(b), provides that I submit the notice of appeal and subscribed signatures to Public Works for its determination on whether the signatures meet the 20% threshold of property owners or verified tenants affected. I cannot assume authority for this decision.

I understand from your letter that the signatures provided by the possible appellant do not properly identify whether the individual is an owner or verified tenant, which has resulted in your uncertain calculations.

Due to these discrepancies, I ask that you re-evaluate the subscribed signatures and provide my office with a final determination on whether this filing will meet the 20% threshold by Monday, November 24, 2025.

c: Michael Tsai, Michell M. Tsai Law Firm
Daniel Schereck, Diamond Heights Community Association
AT&T Wireless c/o Eric Lentz
Bernie Tse, Public Works
Nicolas Huff, Public Works
Jason Wong, Public Works
Ian Schneider, Public Works
Brad Russi, Deputy City Attorney
Kristen Jensen, Deputy City Attorney
Austin Yang, Deputy City Attorney
Lisa Gibson, Planning Department
Joy Navarrete, Planning Department
Corey Teague, Planning Department
Tina Tam, Planning Department
Josh Switzky, Planning Department
Dan Sider, Planning Department
Aaron Starr, Planning Department
Elizabeth Watty, Planning Department
Jonas Ionin, Planning Commission
John Dacey, Planning Department
Julie Lamarre, Board of Appeals
Alec Longaway, Board of Appeals

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T. 628.271.2000 | 49 South Van Ness Ave. Suite 9th Floor, San Francisco, CA 94103

November 24, 2025

Ms. Angela Calvillo
Clerk of the Board
1 Dr. Carlton B. Goodlett Place
City Hall – Room 244
San Francisco, CA 94102

RE: Second Updated Response Letter
Planning Case No. 2024-004318CUA
350 Amber Drive – Conditional Use Authorization Appeal
AB 7521 LOT 005

Dear Ms. Calvillo:

This letter is a Second Updated Response to your October 29, 2025 request to the Office of the City and County Surveyor for verification of signatures with respect to the above appeal.

In our initial response letter dated October 31, 2025 we found that the verified appellant's signatures represented 16.92% of the area, less than the required 20% of the area as defined in Sec. 308.1 of the San Francisco Planning Code and therefore did not meet the threshold for an appeal.

As we pointed out in our updated response letter dated November 18, 2025, the reason for this calculation was that the signatories did not state whether they were owners or tenants as is usual in form column three, so we were only able to verify owner's names using the Assessor Recorder records, and not those of any tenants as it was not stated which signatories were tenants. Therefore we only included verified owner's names in this initial calculation.

However, as we pointed out in said letter dated November 18, 2025, if the names of all other signatories that were not verified owners or otherwise dis-included for other reasons per said Sec. 308.1 are taken to be verified tenants pursuant to the declaration on the Appeal Letter that the signatories are owners or verified tenants, the calculated area represented by appellants signatures is 20.36% and does meet the threshold for appeal.

As this situation was novel to us we provided our earlier updated response dated November 18, 2025 in order to provide a complete report on our verification of signatures and calculation of area, and deferred to the Clerk of the Board on whether the signature list met the threshold for an appeal Under Sec. 308.1 of the San Francisco Planning Code.

However, we understand from your Memorandum to our office sent November 21, 2025 that Planning Code Sec. 308.1 requires our office to make this determination. Therefore, we have reviewed again the calculations, signature list, Planning Code, and points made in a procedural objection received from the appellant Daniel Schereck on November 21, 2025.

Based on this latest review, it is our office's conclusion that the submitted signature list, considered in light of the declaration made on the list that all signatories are owners or verified tenants, constitutes 20.36% of the calculated area and therefore does meet the threshold for appeal.

Sincerely,

Elias French
City & County Surveyor

Introduction Form

(by a Member of the Board of Supervisors or the Mayor)

I hereby submit the following item for introduction (select only one):

- ☐ 1. For reference to Committee (Ordinance, Resolution, Motion or Charter Amendment)
- ☐ 2. Request for next printed agenda (For Adoption Without Committee Reference)
  (Routine, non-controversial and/or commendatory matters only)
- ■ 3. Request for Hearing on a subject matter at Committee
- ☐ 4. Request for Letter beginning with "Supervisor _____ inquiries..."
- ☐ 5. City Attorney Request
- ☐ 6. Call File No. _____ from Committee.
- ☐ 7. Budget and Legislative Analyst Request (attached written Motion)
- ☐ 8. Substitute Legislation File No. _____
- ☐ 9. Reactivate File No. _____
- ☐ 10. Topic submitted for Mayoral Appearance before the Board on _____

The proposed legislation should be forwarded to the following (please check all appropriate boxes):

☐ Small Business Commission ☐ Youth Commission ☐ Ethics Commission

☐ Planning Commission ☐ Building Inspection Commission ☐ Human Resources Department

General Plan Referral sent to the Planning Department (proposed legislation subject to Charter 4.105 & Admin 2A.53):

☐ Yes ☐ No

(Note: For Imperative Agenda items (a Resolution not on the printed agenda), use the Imperative Agenda Form.)

Sponsor(s):

Clerk of the Board

Subject:

Hearing - Appeal of Conditional Use Authorization Approval - 350 Amber Drive

Long Title or text listed:

Hearing of persons interested in or objecting to the approval of a Conditional Use Authorization pursuant to Planning Code, Sections 209.2, 303, and 304 for a proposed project at 350 Amber Drive (Assessor's Parcel Block No. 7521, Lot No. 005) identified in Planning Case No. 2024-004318CUA, issued by the Planning Commission by Motion No. 21825, dated September 25, 2025, to install a new AT&T Macro Wireless Telecommunications Facility on an approximately 104 foot tall monopole, consisting of 12 new antennas, and nine new remote radio units and ancillary equipment within the P (Public) Zoning District and OS Height and Bulk District. (District 8) (Appellant: Mitchell M. Tsai of Mitchell M. Tsai Law Firm on behalf of the Diamond Heights Community Association) (Filed October 27, 2025)

Signature of Requestor: f Ellen Somera

251098